No._____

United States Circuit Court of Appeals

Ninth Circuit

Appeal from the District Court of the United States for the District of Oregon

OREGON & CALIFORNIA RAILROAD COMPANY, A CORPORATION, *et al.*,
Defendants and Appellants

JOHN L. SNYDER, *et al.*,
Cross-Complainants and Appellants

WILLIAM F. SLAUGHTER, *et al.*,
Interveners and Appellants

vs.

THE UNITED STATES OF AMERICA
Appellee

—o—

TRANSCRIPT OF RECORD

VOLUME VI

PAGES 2669-3240

TITLE

NAMES AND ADDRESSES OF SOLICITORS UPON THIS APPEAL

For Appellants
OREGON & CALIFORNIA R. R. CO., et al.:

WM. F. HERRIN,
P. F. DUNNE,
J. E. FENTON,
San Francisco, Cal.

WM. D. FENTON,
Portland, Oregon.

For Appellants—JNO. L. SNYDER, *et al.*:
A. W. LAFFERTY,
Portland, Oregon.

For Appellants—WM. F. SLAUGHTER, *et al.*:
L. C. GARRIGUS,
A. W. LAFFERTY,
MOULTON & SCHWARTZ,
Portland, Oregon.

DAY & BREWER,
Seattle, Wash.

A. C. WOODCOCK,
Eugene, Oregon.

For Appellee:

JAMES C. McREYNOLDS,
Attorney General.

CLARENCE L. REAMES,
U. S. Dist. Attorney for Oregon.

B. D. TOWNSEND,
F. C. RABB,
Special Assistants to the
Attorney General.

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"OREGON and CALIFORNIA LAND GRANT

"HEARINGS

"BEFORE THE

"COMMITTEE ON THE PUBLIC LANDS

"HOUSE OF REPRESENTATIVES

"ON

"H. R. 22002

"CONCERNING THE OREGON AND CALI-

"FORNIA LAND GRANT

"APRIL 2, and MAY 2, 6, 8, and 25, 1912.

"WASHINGTON

"GOVERNMENT PRINTING OFFICE

"1912."

(Pages 55 to 66 inclusive.)

[2669]

"COMMITTEE ON THE PUBLIC LANDS,

"HOUSE OF REPRESENTATIVES,

"Wednesday, May 8, 1912.

"The committee met at 10:30 o'clock a. m., Hon. Joseph T. Robinson (chairman) presiding.

"There were present before the committee Hon. A. W. Lafferty, a Representative in Congress from the second district of Oregon, and Mr. A. C. Dixon.

"The Chairman. Gentlemen of the committee, the hearing today is on H. R. 22002, by Mr. Lafferty. Mr. Dixon desires to be heard, and we will now hear him.

"STATEMENT OF MR. A. C. DIXON.

"Mr. Dixon. Mr. Chairman and gentlemen, I am representing primarily the Booth-Kelly Lumber Co., the largest purchaser from the O. & C. Railroad Co. of the grant lands under discussion. I am also authorized to speak in this connection for practically all of the 45 large purchasers who are parties in these suits. I feel that after what Mr. Townsend has said I can add very little of interest, and my chief purpose in taking your time now is to touch upon a few points which I think bear especially on the rights of these purchasers, and also to be subject to any questions you may want to ask concerning some of the points brought up the other day, and upon which I may be able to enlighten you.

"Now as to our views relative to our situation and to the compromise, we feel that the Government can

afford to be very considerate of us for a number of reasons. First, going back to the purpose of Congress in granting these lands, it was primarily that the road be built, and, secondarily, that the country be developed as a result of this grant of land. We take the position that we have aided in the development of that section of the country to the fullest extent, and that in no other way could the lands have been used for development except in the way we have used them.

"The reason for that is this: The land is heavily timbered, much of it on steep hillsides, and in most instances the soil is rocky and not susceptible of cultivation. Now, no actual settler could have taken 160 acres of these lands, nor 1,600 acres, nor any other number of acres, and made a living for himself and family. It would have been practically impossible, and is today, with the better means of transportation and other facilities that they have now. We have taken these lands and solidified them by buying the even-numbered sections and have built mills, made large investments, built towns, and furnished employment to hundreds and thousands of people. Now, just to spend a moment on that point. In our own instance the largest town that we have, the town of Wendling, is devoted entirely to milling. There are about 800 people there, with 300 men working in the mills and timber. They have an electric-light system, water system, and all the conveniences that a little town of that kind might have. The wages we pay are good—excellent, I should say—from the point of view of people here. Twelve dollars a week is the minimum for mill-

men and $17.50 is the average for employees in the woods. The more provident among these men mostly have their own homes or own farms elsewhere that they cultivate during a part of the year, and in every case they are better situated than the average or than almost any of the homesteaders in that section. I mention this town first, but there are dozens more there in a similar situation. In addition to these, there are a number of logging camps and mills where there are many men employed and where there are no towns, and these people naturally gravitate to the larger towns, such as Eugene, where I live. This is a town of 10,000 people now, and 10 years ago there were only 3,500 people there. The pay roll of the mills nearby is about $2,000,000 a year, and the development of the milling industry is almost the sole reason for the growth of the town.

"Mr. Townsend mentioned the other day the good faith with which these lands were purchased, and in this connection I wish to speak simply of our own case. We started out 16 years ago, without any capital of consequence, and upon the suggestion of Mr. Collis P. Huntington, of the Southern Pacific Co., we leased a small sawmill in the Willamette Valley with the idea of trying to find out if fir lumber, the only timber growing on these lands, could be shipped outside of the State at a profit. Up to that time there had been no market for, and no attempt to ship, fir lumber out of the State of Oregon. Mr. Huntington made us some special rates and we leased a mill for a year and started to develop the fir-lumber market. At the end of a year Mr. Huntington

stated to us that the rates were fairly satisfactory to him, and he would continue them in force. We found that we had made a fair profit, and accordingly we bought the mill which we had under lease. When we bought the mill we had to buy something to run it on, and so we bought timber near at hand, half of it from the railroad and the other half from settlers or whoever happened to have it. That was the beginning of our business. A year or two later the business still continued to show a profit and we purchased another mill and also another body of timber, and for a period of eight or ten years we bought these different bodies of timber at the going prices at which anyone could have purchased them if they had cared to. Now I do not think I need to dwell long on this point, because Mr. Townsend has said that in all of his investigations he has found no evidences of any fraud, and I know the circumstances in all of these cases, and it is hardly possible to think that there could have been anything of that kind. The lands were open for purchase and sale, and you or I or anybody else could have bought all of them if we had had the money to do so.

"Now in buying these lands we followed the business-like custom that we still follow, and I think that all of you would in like circumstances follow. We submitted each abstract to our attorneys, and in no single instance that I know of did they question the Oregon and California Railroad's deeds or raise any question whatever as to their title. As Mr. Townsend has told you, there was no question in the minds of anyone as to the validity

of these titles, and, using his expression, the titles were current in Oregon for years and years, and not only in Oregon but with the United States Government, because our company in several instances, and other companies, traded property with the Government, traded these lands back to them for other lands. We do not claim that we have a right to consider because the Government took the lands that the titles were good, but they made no question about it. I am simply telling you this to show you that they were just as ready to take them as anyone else.

"Now as to the suits themselves. There are 45 of these, covering approximately 400,000 acres of land. The other 400,000 acres which have been sold are in the hands of four or five thousand people. We do not want these small holders sued. Certainly not. But we are unable to see the difference between the titles that we have and the titles that they have. In other words, we do not see why 400,000 acres in the hands of 45 individuals and corporations, probably two or three hundred people altogether, stands in any different relation to the Government as to ownership than the 400,000 acres in the hands of four or five thousand people.

"Now, in the case of the Drew Timber Co., one of these parties: They bought 5,320 acres, and they have 11 bona fide stockholders, less than 500 acres to each stockholder. I fail to see the justice in attempting to take these lands away from these people when, if the 11 people had only known the circumstances, they could have gone out and bought 999 acres apiece and their

titles would not have been questioned. Our company owns 74,000 acres, and there are approximately 45 of us—some of the stockholders are estates—and there are more people interested in our company than there are thousands of acres involved. Now, the question was asked the other day as to the remedy we have against the railroad company. Our attorneys, and all the attorneys that have given the matter any attention, so far as I know, have said that we could not recover. Now, whether the railroad company knew this limitation or not I am not prepared to say, but they did not give us warranty deeds, and even if we could get back from them several years hence the amount that we paid for these lands we might about as well lose the whole thing. What we could recover would amount to but very little, as compared to the actual loss sustained, and I will illustrate one particular case. The last purchase made by us was 19,000 acres bought at $17.50 per acre. We bought the land from people who had bought it from the railroad company for $10 an acre, on time, with eight payments still to be made, and we assumed the contract and have made seven of the other eight annual payments still to be made. Now, when we got that 19,000 acres we planned another large milling enterprise. We bought this in 1905, and we immediately went to work and bought 19,000 to 20,000 acres intermingled with this 19,000 acres. The only way that land can be operated successfully for lumbering purposes is to have it all in a solid body. You can't have a checkerboard tract, and you can't build a railroad and cut logs on other people's

land. Now, it does not need any explanation to show you where we would be if we only got our money back. In the first place we can not get more than $10 an acre, and in the second place we can not get that until our title is proven perfect, and that will evidently be some time hence, and, as stated, our attorneys advise we could not recover then.

"Now, as to our operations. In our particular case one of our mills burned down during the pendency of this suit. Our largest mill burned in July last year, throwing out of employment perhaps 275 or 300 men. We still have the mill site, and we are anxious to rebuild; we are almost tempted to rebuild anyway, but we do not feel that it is a safe business proposition to put that money into a mill when we do not know for sure that we are going to have anything to operate the mill on, if the Government is successful in this suit and takes the land. Two other concerns have lost their mills by fire and are in the same situation. In addition to that, if we rebuild now and go on with developments we will have to borrow money, and we can't bond our lands or raise money on our property on account of this suit.

"Four years ago I happened to be in Washington on other business when this resolution came up, and seeing, as I thought, that it was dangerous to us, I sent for some of our people, and you are fairly familiar with the efforts that were made to have our titles quieted at that time. At that time the Attorney General and Mr. Townsend, and as far as I know the majority of the Public Lands Committee, were in favor of and were

anxious to have our titles quieted. It seems to me now, and I am sure I thought then, that there should be no trouble at all to get title to these lands and get entirely out of the difficulty if it were not for the one legal point that was made, which was that to quiet our titles then would have injured the Government's case against the railroad. The files of the committee and the files of the department will show the investigations that were instituted at that time. They went into the matter very fully, and there were several volumes of testimony published. It seems to me that it goes without question that unless circumstances are different Congress should be of the same opinion yet, and now that the way is open grant us the relief that we are asking.

"As to the compromise itself, we think there is no question about our good faith in the purchase of these lands. We think that there is no question about the original purpose of the Government having been literally carried out in a much better way than it could have been under actual settlement. In this regard Secretary Fisher, in talking to me the other day, said that if the lands were of the character I said they were the Government made a tremendous mistake in 1866 in granting to the railroad company lands of a character not susceptible to settlement and then asking the railroad to sell them only to actual settlers. Now, they did do that, and you must know without seeing photographs of the timber that these lands are timber-lands or we would not have them, because we are in the timber business only. Now, if the Government did make this mis-

take 40 years ago we ask you here that we be relieved from the ill effects of it. We do not want to pay the penalty for the mistakes of the Government. We have cut over about 15,000 acres of land. We have done the larger part of the work necessary to make that land valuable for cultivation, and nobody wants to buy these lands now as homesteads at any price. Eighty-five or ninety per cent of them are useful only for reforestation, and we have not started to reforest them because we do not know to whom they belong. We have spent the necessary money to clear them of timber, and if the intention was that actual settlers should make homes on these lands, how much less useful for this purpose would they be if the timber was still standing?

"Now, for the reasons I have stated, we do not feel that we ought to have to pay anything to get these titles in good shape, but we have been sued for something over three years and have not yet had a chance to appear in court. We foresee that it will be at least five years longer before the suit can be determined. In the meantime, on the very lands in question we are paying something more than $20,000 a year in taxes, and we are paying several thousand dollars a year for fire protection. We have a force of organized rangers for that purpose, and we are also paying interest on our bonded indebtedness on these lands. Now, notwithstanding the fact that we do not feel that we ought to pay anything, and that Mr. Wickersham and Mr. Townsend, down in the bottom of their hearts, feel that we ought not to, except as a legal proposition—notwithstanding these

things, we have made a proposition to pay the sum mentioned in the bill as a matter of expediency, so that we may know now where we are at. We had better lose these lands now than to go along for a number of years and let them lie idle and finally get them, because the damages to us in the meantime would be irreparable financially and so far as the ages of some of us are concerned. We can not get our youth back, or our efforts. Three or four of the largest holders of lands have died since this legislation was passed four years ago. We are trying to bring about a settlement which will leave the rest of us alive when the title is finally determined.

"Our course if this bill is not passed will not be one of our own choosing, but will be literally forced upon us. In that case we will be compelled to intervene in the railroad suits and add our equities to whatever equities the railroad people may have, and make the hardest kind of a fight we can to get our lands and also to help the railroad company out of their difficulties. Now, Mr. Townsend gave you a partial history of this resolution. There was never any trouble in Oregon, never a word said or any complaint about the lands that were sold. The whole difficulty arose when Mr. Harriman withdrew the lands from the market. The people and the commercial clubs and various organizations in Oregon started the agitation and sent a memorial to the legislature asking that the lands be sold and opened to settlement. During all this time, the four years since this resolution was introduced in Congres, we have carefully refrained from allying ourselves with anybody, because from the state-

ments of the Department of Justice, the President, and every one else we felt the time would come when our skirts could be cleared without injuring the railroad suit, and the Government would see the justice of our case and our titles would be quieted. We are urging that upon you today. I am not like Mr. Townsend. He would like to see section 6 passed, but he will not urge it, but I do earnestly urge upon you that this compromise be arranged. I do not make this as a threat, but as a statement of fact. If relief is not afforded we will have to tie up with other litigants in a way that may result in defeating the primary purpose of the Government as to the recovery of the railroad lands. If the suit is won against these purchasers it will tear down industries in which millions of dollars are invested. Our company at the time this resolution was introduced had over a million dollars invested, in improvements; $275,000 in railroads and equipment, and something over $700,000 in sawmills. There are a number of others that have the same or larger investments. If this suit is won, their property will be worthless; the property in the mill towns will be worthless, the homes that these men own will be worthless, and there will be several thousand employees out of positions. That will be the condition if the Government takes this land and puts it into forest reserve or into the public domain.

"Now, I think, with what Mr. Townsend has said, I have about covered the situation, and I do not feel like imposing on you any longer.

"The Chairman. Mr. Dixon, you stated that those

whom you represent, the parties in the 45 suits, do not wish to see the small purchasers sued, but as a matter of law their equities are absolutely the same as yours, which seems to be true. You have also said that unless this legislation or some similar legieslation is passed, those whom you represent will be compelled to intervene in the railroad suit and help to win that suit if possible for the railroads. What is the attitude of the purchasers whom you represent—what will be their attitude in the event that this legislation should be passed?

"Mr. Dixon. Well, Mr. Chairman, we are not interested at all in the other side, and our attitude would be one of neutrality.

"The Chairman. Actual neutrality or nominal neutrality?

"Mr. Dixon. So far as my company is concerned it would be actual. So far as I know I think it would be absolutely actual with all the defendants. I do not think any of the defendants are meddlers or anything of that sort.

"The Chairman. I did not mean that at all, but you can readily understand from the statement of Mr. Townsend and from your statement that this is a matter that widely affects the feeling and interest of the general public there, and you yourself have volunteered the statement that if the legislation is not passed you will help to win the suit for the railroads, and that you are in fact in sympathy with those who are in the suit. Now, I think the committee is entitled to know, without any feel-

ing toward anyone, since you have volunteered that statement, what your attitude will be if the legislation is passed. We are entitled to know that, since you have volunteered the suggestion that in the event the legislation is not passed you will join in with the railroads to help them win this suit.

"Mr. Dixon. If the legislation is passed, our first move will be to ask for a stipulation and then pay for the lands gotten under the railroad deed. After that is done we will observe, so far as our company is concerned, absolute neutrality. Our desire has been to see these lands opened up. We are embarrassed by the railroad holding up 2,400,000 acres, and the whole State has been kept from its proper development thereby. And I may say to you further in this connection, I was in a number of meetings where the resolutions were brought out and sent to the legislature, where we were considering this whole proposition, and the only desire of every one present was that these lands be sold. None of these people had a clear idea as to the rights of forfeiture. Our idea simply was to force the railroad company to sell these lands. We are in that attitude today. We want them sold.

"The Chairman. You have stated that the lands you have are not fit for actual settlement. Is the general character of these lands the same?

"Mr. Dixon. Well, as I stated, the fact that we purchased the lands for lumbering purposes is pretty good evidence that that land is not fit for actual settlers. As

to the railroad grant itself, I have been over it pretty well a number of times and out into the timber, and I think the actual percentage—anything that I might say would be a guess, but 20 per cent would be a pretty close guess—I think there might be 20 per cent of these lands that can be cultivated. This whole subject was crystallized on account of the refusal of the railroad company to sell some agricultural lands in Josephine County to a vineyardist. He had a vineyard down there, and I think it was 80 acres alongside of his vineyard, belonging to the railroad company, that he wanted to buy. They refused to set a price on it, and that is where the whole trouble started.

"The Chairman. What is the general description of the lands which your client holds?

"Mr. Dixon. They are all timbered lands; all covered with fir timber. They are rather hilly, usually along a little canyon with a creek running down the center. We have five timbered bodies, each one along a creek or river. We like to have them that way on account of the facilities for operation. The timber is cut and hauled down to the creek; then we build dams and float it out to the river or railroad it out.

"The Chairman. You heard Mr. Townsend's statement as to the value of the railroad lands, did you not?

"Mr. Dixon. Yes.

"The Chairman. What do you say as to the value of those lands?

"Mr. Dixon. He said he was certain that they were worth $25 an acre, and that some of them were worth as high as $30 an acre. I have been buying those even-numbered sections for our company for some time back, and the highest price that I have ever paid is $22 an acre, and that was within the last three years. It is only within three years that I have purchased any for the company. I have purchased several thousand acres in that time.

"The Chairman. Are those lands rising in value?

"Mr. Dixon. I think so, yes. There is no question about the increase in value. They have increased since we purchased them, although our own lands are not worth as much as we paid for them on account of the cloud on the title.

"The Chairman. What area of the lands purchased from the railroad company or their grantees by your people have been cut off? Do you know, approximately?

"Mr. Dixon. Well, in our case we have cut about 15,000 acres, and half of that is from the lands in question.

"The Chairman. Has there been any cutting recently done?

"Mr. Dixon. We have been cutting them steadily at a uniform rate since 1898.

"The Chairman. What area of lands that have been cut off have been sold, approximately?

"Mr. Dixon. Practically none.

"The Chairman. What area of them, if any, has been cultivated?

"Mr. Dixon. Practically none. They are not susceptible of cultivation. Our idea has been to reforest them, and we have left the small timber standing for that purpose.

"The Chairman. When was the first knowledge received in that country, actual knowledge, that there was any question as to a defect in these titles?

"Mr. Dixon. In 1906.

"The Chairman. And that was occasioned by a complaint made by some one who you say was a vineyardist to use the land for a vineyard and the railroad would not sell it to him?

"Mr. Dixon. The first I heard of it was in Josephine County, near Grants Pass, just outside of the city. There had been a great deal of irritation over the State, but it had never gotten any further than the murmuring of a general spirit of discontent. There was a good deal of cursing and damning the railroad company for not disposing of the lands, and about that time there was called a shippers' meeting to discuss freight rates and matters of that kind down at Medford, in Jackson County, just south of Josephine County. At that meeting a resolution was introduced to be presented to the legislature. These people came to discuss freight rates, but some of them brought this resolution in and intro-

duced it, and it was passed. This was done in three or four towns over the State, and finally they got a Mr. Mullit, a banker from Ashland, to introduce the memorial in the legislature.

"The Chairman. Well, now, why would you and your clients want to intervene in this railroad suit?

"Mr. Dixon. For this reason. Our idea in wanting to compromise is to get out of litigation, and if we cannot do this the only way we can hurry matters, advance them, is to get in the railroad suit. The object of the Government's attorney is to keep us behind the railroad company, and not let us come to trial before the railroad company does, because they fear our equities will allow us to win out and thus aid the railroad company. Our only purpose would be to crowd ourselves up and be in the first trial as a matter of expediency and to hasten the final decision.

"The Chairman. You feel that you have superior equities to any that the railroads may assert? Wouldn't you be rather strengthening the railroad case than strengthening your own case by intervening?

"Mr. Dixon. I do not feel that we would be strengthening our case at all and I do not think that our attorneys feel that the court would do an injustice to us simply because we were allied with the railroad company. We would get our rights and the railroad company would get theirs, but Mr. Townsend seems to be afraid that intervention on our part might prejudice his case.

"The Chairman. In other words, the influence, the actual influence, which the clients whom you represent might reflect for the benefit of the railroad company? That was clearly the intimation that Mr. Townsend made, and I think the committee may very well consider that without reflecting on anybody.

"Mr. Dixon. We don't think it would be anything of the sort. The main idea in allying ourselves with the railroad company is to get into court at the same time they do. If we do not get this compromise, the first thing I will do when I get home will be to discharge our employees and close down our mills, because there is a great question in the minds of our attorneys as to whether or not we will be asked by the Government to pay double or treble damages for trespass on their property.

"The Chairman. You mean that they might demand an accounting for the lumber taken?

"Mr. Dixon. It just depends on the situation here in Washington, the Attorney General, the temper of Congress, or something of that kind. Our attorneys have advised us that they thought it was not a good business proposition and they recommended against continuing our operations.

"The Chairman. As a matter of law, you would probably be held accountable for the timber cut if you lost the land.

"Mr. Dixon. We do not want to take any risk, anyway.

"Mr. Raker. In speaking of intervention, is it not a fact that some of the owners claiming from 500 to 1500 acres, who received their lands from the railroad company as part of this grant, as well as the company which you represent and the 45 others, sought to intervene in the railroad suit, and the court held that they could not intervene?

"Mr. Dixon. No, I think not; Mr. Lafferty went over that quite clearly in his presentation. The intervention that occurred, as I understand it, was the intervention of people who had settled on these railroad lands, made actual settlements on 160 acres, with the supposition that if this suit was determined in favor of the Government they would be first on the ground and would get 160 acres at $2.50 an acre, and they intervened to establish their rights. If I understand correctly, their intervention was of no avail.

"Mr. Raker. No one up to date has sought to intervene who owns lands obtained from the railroad company.

"Mr. Dixon. Not so far as I know; and I think I am correct in that. The taking of evidence in the railroad suit is to close the 1st of July, and I presume the trial will come soon after that. If we are going to intervene we will have to do it very soon.

"Mr. Raker. Of course, the amount involved in this suit and its character is one that could be—you have stated you are not an attorney?

"Mr. Dixon. No, sir.

"Mr. Raker. You do not know anything about the proceedings?

"Mr. Dixon. Only in a general way.

"Mr. Raker. Very well, I will change that question. Do you intend to convey to the committee the idea that if your people would intervene in this suit, that with their influence they would be in a position to influence the decision of the court now trying the case?

"Mr. Dixon. I would not want to insult the court, Judge Raker, by inferring anything of that kind.

"Mr. Raker. I know; I am only taking the statement made.

"Mr. Dixon. The statement was that our superior equities, according to Mr. Townsend's statement, might work against the main suit. We have no influence with the court, so far as I know. I do not know the court in Oregon, and I do not think there is any member of the company that would think of such a thing.

"The Chairman. Mr. Townsend did clearly state that one of the reasons which influenced the Government and the Department of Justice in eliminating the purchasers of areas under 1,000 acres was to prevent having to encounter the influence which would manifestly and naturally be exerted by so great a clientage.

"Mr. Taylor of Colorado. By reason of their equities.

"The Chairman. Yes. I do not think that Mr. Dixon mentioned anything of the character that Mr.

Raker suggested.

"Mr. Dixon. I certainly did not intend anything of that sort.

"The Chairman. I drew the inference from the suggestions made by Mr. Townsend that the same thing might result by reason of the superior claims of the parties in these 45 suits.

"Mr. Raker. Now, Mr. Dixon, if you feel that your equities and the equities of the 44 other parties that have been sued are of such a character that by presenting them to the court in conjunction with the railroad company's case—do you state to the committee that you believe that by combining your equities you would have a sufficient standing in court to have the court decide in favor of the company and, of course, eventually your people and the other 45 by virtue of that superior equity combined?

"Mr. Dixon. I think I have stated to the committee that that was Mr. Townsend's idea that it might be the final result.

"Mr. Raker. Is that your opinion?

"Mr. Dixon. I have no opinion on that point.

"Mr. Raker. Have you discussed it with your associates and counsel and others interested in that matter?

"Mr. Dixon. No; the first suggestion that came to us was from the Department of Justice.

"Mr. Raker. What is that?

"Mr. Dixon. I say, Judge Raker, that the first suggestion of this particular point came to us from the Attorney General, as going to show one of the reasons why he was in favor of a compromise.

"The Chairman. Do you know how many corporations own the land that you appear for?

"Mr. Dixon. How many of the 45 are corporations?

"The Chairman. Yes.

"Mr. Dixon. Almost all of them.

"The Chairman. Do you know whether any of the stockholders in these corporations are also stockholders in the railroad company?

"Mr. Dixon. That is not my understanding, unless some of them may own a little Southern Pacific or Union Pacific stock, just as any individual might. I do not think there is any connection in any way.

"The Chairman. Is there any considerable number of the stockholders in the purchasing corporations who are also stockholders in the railroad company that sold to the corporations?

"Mr. Dixon. No.

"Mr. Taylor of Colorado. You don't think there is any reason why your company should meddle in the Government's litigation when you get out of it yourself and have your own title quieted?

"Mr. Dixon. On the contrary, there is every reason why we should not interfere at all. It would not be any

of our business in any way. We certainly could not help either side if we were out of the case. We do not claim to have any influence with the courts in Oregon or any other place, and there is every reason why we should desire that the railroads should sell their lands.

"Mr. Taylor of Colorado. Your object in intervening is so that you can get a decision one way or the other during this lifetime, and close it up as soon as possible?

"Mr. Dixon. Yes.

"Mr. Taylor of Colorado. You desire to expedite the matter rather than to wait the ultimate determination of the Government's litigation and then litigate it afterwards yourself?

"Mr. Dixon. Yes. The Deparment of Justice has stated to us that they will use every means in their power to keep us behind the railroad company. That is the main suit and that is their intention. The proposal has been made by Mr. Fisher, Secretary of the Interior, and I think he will suggest it to this committee, either in writing or in person, and that is, that this bill as proposed is all right, but that the amount stated in the bill should be left discretionary with his department, or the Department of Justice, or some one else. Now, after I stated the conditions to him, his statement to me was that it was probable, or possible at least, that some of these parties would not have to pay anything, by reason of having developed the property, and others, perhaps, should pay more. Then he asked my judgment of what

the value of the land was.

"The Chairman. I think the committee would like to hear from Mr. Fisher on that subject first.

"Mr. Dixon. I want to answer him now, because I will not have an opportunity afterwards. We disagree with him on that proposition. We take the position that these values should not be left discretionary with any one, and that there should be no consideration of the present value of the land, for the reason that whatever development and whatever values these lands have now we have made and created and we do not want to have to pay for it the second time. These lands have their values because we have built railroads over them, because we have bought the even-numbered sections, and gotten them together in one body and have developed them, and we do not think it is a fair thing to have to pay for the values which we have helped to create. We do not want to leave it to the discretion of the Department of the Interior, or whoever else may be designated, and, as I stated to Mr. Fisher, we would prefer to deal with the delay of the law, that we know something about, to dealing with his department or any other department that would not say what it was ready to do. We think it is a matter of present knowledge and within the province of Congress. We think our equities are strong enough to say that we should be relieved now.

"Mr. Raker. There is one more question I would like to ask Mr. Dixon. Your idea in intervening would be to expedite the suits?

Mr. Dixon. Our suits; yes.

"Mr. Raker. You have consulted with your counsel and they have advised you that an intervention in the main railroad suit would tend to expedite the trial of that suit and bring it to an earlier hearing?

"Mr. Dixon. Which suit?

"Mr. Raker. The main suit commenced by the Government against the railroad company.

"Mr. Dixon. No; they say that it will expedite our suit, not the railroad suit. I assume that that will be fixed by the court and tried when the court is ready. The Department of Justice has stated that they would, if possible, keep us behind the railroad company, and our idea in intervening is that we will get on all fours with the railroad company in point of time. We will be in court when they are, in place of being an indefinite time behind them. That is the only purpose of our intervention.

"The Chairman. I believe Mr. Lafferty wants to be heard on this matter.

"Mr. Mondell. I would like to make this suggestion: It occurs to me that it might be helpful to the committee if Mr. Dixon would file on behalf of his company a statement of their principal improvements. That is a matter that we might want to go into, particularly the number of miles of railroad constructed, the number of miles of wagon road constructed, and the approximate cost of them.

"Mr. Dixon. I have sent to me every month our monthly trial balances, and I could furnish them very readily.

"Mr. Taylor of Colorado. No, we want the number of miles of railroad that you have built to penetrate your woodlands, and the number of miles of wagon road, and the cost of those roads.

"Mr. Dixon. I can give you that today or any time —the number of miles of railroads and wagon roads and the number of mill sites.

"The Chairman. Will you attach that to your remarks?

"Mr. Dixon. Yes.

"Mr. Taylor of Colorado. It is your opinion, in regard to this last question that has just been raised, that the present values of the lands depend upon the improvements that have been made, and it is your opinion that the people you represent are entitled to that value rather than the Government of the United States?

"Mr. Dixon. Yes, sir.

"The following is a statement of the railroads, wagon roads, etc., constructed by the Booth-Kelly Lumber Co. upon its lands in Oregon:

"The Booth-Kelly Lumber Co. has constructed and has in operation between 7 and 8 miles of logging railroad and has partly constructed 4½ miles more. The cost of the railroad in operation and that which is almost completed has been $341,000, this cost including equip-

ment. The committee will be able to judge from this statement that the country through which this road is built is anything but level agricultural country. The fact is, the road was very difficult to build on account of rock and the steep hillsides which were encountered.

"The grant lands for which we have been sued, approximating 74,000 acres, cost us $572,000. Our four sawmill plants cost $693,000. Logging property, such as donkey engines and rigging of all kinds, cost us $117,000. Dams and improvements in the rivers, not included in any of the above, cost $32,000. We have paid, all told, since beginning operation, in taxes, $223,000. We have paid out for fire patrol on our own lands $9,000. I might say in this connection we have organized and have charge of a patrol covering the timber lands belonging to about 70 different corporations and individuals—mostly individuals—all of whom contribute pro rata to the expense, and the total of the money we have paid out for fire patrol is several times the amount paid on our own land.

"As to wagon roads, we have approximately ten miles. The small amount of acreage is accounted for by the fact that wagon roads are only built into the edge of the timber, the roads from the edge of the timber in being what are called 'chutes' or pole roads, upon which logs are hauled. Of these, we have built for a number of years past an average of 4 or 5 miles per year, at a cost of twenty to thirty thousand dollars per year; but these roads are worthless as soon as the logs are out, and are not to be considered as permanent improvements.

"In addition to the actual expenditures made as above, our estimate of the cost of finishing the line already graded and under construction is $46,000. This is for the balance of the steel, the building of bridges and culverts, and the laying of sidetracks on grade already constructed.

"In addition to all this we have made permanent surveys and are ready to begin work on an additional piece of road approximately 12 miles in length, which will cost, according to our engineers' estimates, $203,000. All of this work will have to be done to provide for the next five years' logging and is a very small proportion indeed of the total which will be required to work out all of our holdings.

"Figures given above are only for the improvements and operations of the Booth-Kelly Lumber Co.; a number of the other defendants in these cases have railroads and improvements approximating if not equaling those of my company.

"Our mills alone have furnished the entire pay roll and support for the towns of Saginaw, population about 300; Wendling, population about 800; Coburg, population about 700; and has been the principal pay roll in Springfield, population about 1,800. The mills of the other defendants are likewise situated in regard to the towns of Leona, Cottage Grove, Mill City, Falls City, Dallas, Salem, and a number of other smaller towns.

"A number of improvements contemplated by my own company and other companies interested have been

held up on account of this litigation, and if the suits are compromised the development will go ahead again to a remarkable extent.

"Respectfully submitted,

"A. C. DIXON."

Whereupon the attention of witness was called to "A Statement of the railroads, wagon roads, etc., constructed by the Booth-Kelly Lumber Company upon its lands in Oregon," set out on page 66 of this statement, purporting to state the number of acres of land which the Booth-Kelly Lumber Company owned involved in these "Innocent Purchaser Suits," the cost of the four sawmills and other property, taxes paid, etc., and other facts, and stated that he made up the statement himself from the books and reports of the Booth-Kelly Lumber Company and he thinks it is correct.

Whereupon the attention of witness was called to a document with "Report No. 1008, House of Representatives, 62d Congress, 2nd Session. Oregon and California Railroad Land Grant. July 16, 1912.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed. Mr. Robinson, from the Committee on the Public Lands, submitted the following Report. (To accompany H. R. 22002.)" and witness stated that he had seen that document before and had a copy of it, and that he had seen H. R. 22002 accompanying that report.

Whereupon defendants offered in evidence as one

exhibit these two documents, which were received in evidence marked "Defendants' Exhibit 334," and is hereinafter set out and described and made a part of this statement of the evidence and identified as such.

Whereupon the attention of witness was called to a statement or letter of his, of date April 10, 1912, appearing at pages 36, 37, 38, 39, 40, 41 and 42, inclusive, of a publication called "Suits in Oregon Hearing Before the Committee on Public Lands, United States Senate, Sixty-second Congress, Second Session, on S. 5885. A Bill Supplementing the Joint Resolution of Congress Approved April 30, 1908, entitled 'Joint Resolution Instructing the Attorney General to Institute Certain Suits, and so forth.' April 24, 1912. Printed for the use of the Committee on Public Lands, Washington Government Printing Office, 1912," and particularly page 40 of that statement, which reads:

"The lands in our possession are practically all such as are not capable of cultivation until after the timber is removed and the stumps cleared from the land, and then a major portion will only be useful for purpose of reforestation. These lands never could have been put into the hands of actual settlers and actually settled upon, for the reason that a settler could not make a living on 160 acres or any other number of acres of these lands. We have used them in developing the country in the only way in which they could have been used, and in this use we have spent millions of dollars in building railroads, developing the streams, and building sawmills,

and are now furnishing employment to thousands of men, my own company having employed at the time the resolution of April 30, 1908, was passed in the neighborhood of 1,000 men, and our company was in process of development, so that within a few years we would have been employing from three to five thousand men—very many more than the number of men that could have been provided with 160 acres each from the lands in question. Employees in our mills and camps receive good wages, the minimum being $12 per week at the mills and the average wage in our logging camp $16.50 to $17.50 per week. The provident among these men have homes in these mill towns, and some of them own small farms elsewhere, which they cultivate during a portion of the year, and the average are much better off and in better financial position than they could possibly have been had they settled upon these lands as contemplated in the act."

Whereupon complainant renewed the same objections made heretofore to the testimony of this witness with reference to statements made before the Committee of the House.

Whereupon witness stated that he wrote that statement and delivered it to the President and that the statement is true except as to the particular he mentioned a little while ago. He overlooked the statement as to pasturage. He should have said that after these lands were logged off they would be useful only for reforestation or pasturage. That he thinks the state-

ment, "These lands never could have been put into the hands of actual settlers and actually settled upon, for the reason that a settler could not make a living on 160 acres or any other number of acres of these lands," is true.

Whereupon defendants offered in evidence that portion of this letter, to which the complainant made the same objection to this statement as herein heretofore set out, which said portion of said letter so offered in evidence is as follows:

"The Chairman. The following letter addressed to the President by Mr. A. C. Dixon and submitted to the committee in lieu of an oral hearing will be printed as a part of the hearing:

"Washington, D. C., April 10, 1912.

"The President.

"Sir: In compliance with your request that I put in writing my statements to you of Friday last, with reference to S. 5885 and H. R. 22002, these two bills being identical in form, allow me to say that I am not an attorney, so this statement will necessarily be only that of a business man, and therefore will not attempt to deal in legal terms or in such other phases of the matter as might be covered by the Attorney General, who, I understand, will furnish you with an opinion on the bills. I am representing, primarily, the Booth-Kelly Lumber Co., but at the same time am representing the owners of at least 90 per cent of the lands covered by 45 separate suits brought by the United States against pur-

chasers of what are known as Oregon & California grant lands."

(Portion of letter referred to.)

"The lands in our possession are practically all such as are not capable of cultivation until after the timber is removed and the stumps cleared from the land, and then a major portion will only be useful for purpose of reforestation. These lands never could have been put into the hands of actual settlers and actually settled upon, for the reason that a settler could not make a living on 160 acres or any other number of acres of these lands. We have used them in developing the country in the only way in which they could have been used, and in this use we have spent millions of dollars in building railroads, developing the streams, and building sawmills, and are now furnishing employment to thousands of men, my own company having employed at the time the resolution of April 30, 1908, was passed in the neighborhood of 1,000 men, and our company was in process of development, so that within a few years we would have been employing from three to five thousand men—very many more than the number of men that could have been provided with 160 acres each from the lands in question. Employees in our mills and camps receive good wages, the minimum being $12 per week at the mills and the average wage in our logging camp $16.50 to $17.50 per week. The provident among these men have homes in these mill towns, and some of them own small farms elsewhere, which they cultivate during a portion of the

year, and the average are much better off and in better financial position than they could possibly have been had they settled upon these lands as contemplated in the act."

Whereupon witness being shown "Defendants' Exhibit 335," being a map issued by the "Department of the Interior, General Land Office, Fred Dennett, Commissioner," said that he thinks the map is what it purports to be.

Whereupon defendants offered said map in evidence as "Defendants' Exhibit 335" and the same was so received and is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such.

Whereupon witness upon cross-examination further testified that he, with certain other representatives of the large purchasers of these railroad lands, appeared in the early part of the year 1908 before the Public Lands Committee of the House with reference to Senate Joint Resolution No. 48, which afterwards became effective by passage and approval April 30, 1908, for the purpose of urging an amendment to the resolution which would confirm the titles of the purchasers, and that after the failure to secure such an amendment they endeavored by what they considered legitimate means to defeat the resolution itself. The effort was to try to get the resolution amended on final passage, or if they could not have it amended to have it defeated. It is not true that they in any way assisted the Government in

securing the passage of that resolution to authorize the institution of this suit. His reasons were not the only reasons and arguments presented to the two committees of Congress and which were considered by these committees in passing upon these bills. There were other reasons than those contained in his statement which were presented to the Committees of Congress during the consideration of these two bills during the above session which finally became enacted into law with some amendments as the act of August 20, 1912. The question as to whether compromise would be authorized or not was the main question that he heard discussed and was the only one he was interested in. He was not connected with the Booth-Kelly Lumber Company during the time that it made all of its purchases referred to by Mr. Booth in his testimony, but was with the company when it purchased, he would say, half of them or more. The railroad company, in making all the sales of that land, so far as it came within his observation, endeavored to get all they could for the land. The Booth-Kelly Lumber Company paid the market price, or a little above the market price at that time. As to the restrictions, he never had heard of them at the time the Booth-Kelly Lumber Company purchased the lands. He knew nothing of that. The Booth-Kelly Lumber Company paid the railroad company more than it had to pay for the intervening even-numbered sections. No one representing the railroad company ever informed any members of his company, so far as he knows, of these restrictions, or gave them any warning as to the nature of the title

that they were buying. He is quite sure they did not, and this was another reason that was submitted to the two committees in Congress upon the question of the equitable claim of these purchasers to a compromise as proposed by the act of August 20, 1912. In the deeds made by the railroad company to the Booth-Kelly Lumber Company there is no assurance or warranty of title. His understanding is that these deeds are legally termed bargain and sale deeds. There is no warranty, at least, in the deeds. One of the matters discussed during this time and presented to both committees as to this proposed legislation which finally became the act of August 20, 1912, was that the railroad company had sold these lands to purchasers for the highest market price, and no disclosure was made as to the restrictions upon the sale of the lands contained in the granting acts, and had given deeds without warranties, which left the purchasers without remedy if the Government should enforce a forfeiture against the purchasers. The refusal of the railroad company to sell its lands further arrested that part of the development that was dependent upon the operations on timber lands, and if the sale of these lands in that manner contributed to the development of Oregon, the refusal to sell them in that manner necessarily arrested the development of Oregon and in his opinion it could not be true that the railroad company has kept within the spirit or reason of these acts of Congress by first selling the lands in large quantities to mill operators and afterwards refusing to sell them at all. He has heard all of the testimony of Mr. Booth

as to the availability of this land for grazing and other agricultural purposes and thinks that his testimony is generally correct upon these questions. It is true that the more the settler could get for timber on the lands, the more money he would have for development purposes, but he does not think the value of the timber would have anything to do with the settlement. If the settler could sell the timber on these timber lands it would certainly have the effect to help rather than retard the settler. He does not think the value of the timber would have any bearing on his testimony in regard to the use of the lands for dairying or other agricultural purposes. Solid bodies of timber lands, in a general way, are essential to practical milling; the removal of the timber is also essential to any subsequent use of the lands in this vicinity for grazing or other agricultural use, referring now to lands that have heavy growth of timber upon them. It is true that if the railroad company should withhold permanently the alternate odd numbered sections in this timbered region involved in this suit, particularly in these localities with which he is personally acquainted, the necessary effect of that would be to prevent logging off the lands and prevent their ultimate subjection to grazing or other agricultural use, such of them as are adapted to that use. The railroad company controls practically all transportation facilities from Eugene south to the southern boundary line of the State, that is, with reference to the territory within the exterior boundary lines of the railroad grant, and has controlled it since the railroad was

constructed. The meetings referred to in his testimony and that of Mr. Booth were called, as far as he knew, primarily to object to the advance in rates threatened in 1906, and to rates that were considered unfair and these protests in regard to the land grant developed at these meetings were the first that he heard. The principal complaint was against traffic matters, unfair and unjust rates, as they thought at that time at least, and the matter of withholding the lands from settlement, the matter of the Railroad Company building its own mills to saw their ties and other things of that character were also discussed, including witholding the lands from sale. The principal object of the meeting at Eugene so far as he knew of it and he was one of the Committee on Arrangements, was to discuss traffic matters. Personally he did not know of the resolution in regard to the sale of grant lands until about the time the meeting was called to order. There was no commercial or industrial reason at any time since he has known these lands, as to a majority of the lands, why these lands could not have been sold in tracts of 160 acres and at a price not exceeding $2.50 per acre. He would not speak as to all of these lands, because he does not know. The vast majority of them could have been sold at that price at any time since he has been connected with the lands, in 160 acre tracts. He is not thoroughly familiar with the Timber and Stone Act requirements, but these lands could have been sold to individuals, in his opinion, at any time that they had an opportunity. He does not think the Railroad Company had to charge more than

$2.50 an acre in order to develop the country. He would say that perhaps 55 or 60 per cent of the logged off lands of the Booth-Kelly Lumber Company have been logged off since the year 1905. There have been practically no sales made at all of land grant lands by the purchasers of such lands since this agitation concerning the limitations upon the sale of the lands by the Railroad Company, commenced in 1906. With reference to the limitations upon the sale by the Railroad Company of these lands, the Booth-Kelly Lumber Company has repeatedly refused to buy grant lands since 1906 and refused to sell these large bodies of timber. Including the holdings of the Booth-Kelly Lumber Company and their timber lands in that vicinity and for that matter the other timber within the exterior boundaries of this railroad grant consists almost all together of fir and pine. It takes a number of years for these trees of long growth to reach maturity. There would be no very great change in a period of 25 or 30 years, nothing that would be noticeable except to an expert or some one making a critical examination. The conditions are approximately the same in October, 1912, as they have been ever since he has been acquainted with the land, and from the age of the trees were in the same condition in 1912 as they were 30 or 40 years ago without more than a slight change in the growth of the trees.

Whereupon on re-direct examination witness further testified that rails have been laid by the Oregon Electric Railway and trains are now operating from Portland through to Eugene and the official completion of this

road to Eugene was in September 1912. He thinks there is also a railroad from Cottage Grove leading out into the foothills and mountains of the Cascades, a distance of 25 miles not owned by the Southern Pacific Company, or the Oregon and California Railroad Company which serves a lot of saw mills on that line and it is true that according to general repute as to ownership the Hill Lines have the Pacific & Eastern Railway Company, a line from Medford in the Rogue River Valley to Eagle Creek and up the Rogue River Valley on surveyed connection to what is called the Oregon Trunk, leading from a connection with the S. P. & S. Railway up the Columbia River and up the Des Chutes south to Bend and beyond. He understands there is about 25 miles of that road already built in Jackson County. He thinks it is true up to this date with very slight exceptions that the facilities for shipment of all lumber or timber on the water shed of the Coast mountains are by way of Marshfield and other ports on the Pacific Ocean.

Whereupon witness further testified as follows:

Q. Now, in your letter of April 10, 1912, to the President, referred to and submitted to the Committee on Public Lands of the United States Senate, as you have heretofore identified it, you have used this language: "Within the next several years a great deal of irritation was created in Oregon by reason of the refusal of the Oregon & California Company, or the Southern Pacific Company, to place a price on these lands or offer them for sale, and as a result of this irritation a number of commercial and other trade organizations adopted

resolutions condemning this course on the part of the Railroad Company, and asking that some steps be taken to compel them to dispose of the lands." Referring to that, and refreshing your memory from that statement, what is the fact in that respect. Is that correct?

A. That is a correct statement.

Whereupon witness further testified that he is not positive but thinks that Senator Mulit, State Senator of Jackson County at that time introduced the resolution before the meeting at Eugene in 1906 relating to the sale of these railroad lands, but he is not sure that he was the one who introduced the Memorial in the Legislature of 1907. It is his recollection that the resolution that Senator Mulit brought to the Eugene meeting was introduced and adopted at that meeting at Eugene. That resolution and all the others that he ever knew anything about were simply urging the Company to dispose of the lands. He never heard of the matter of forfeiture until 1908 when he was in Washington.

Whereupon witness further testified as follows:

"Q. That is to say, the demand of the public in these meetings that you attended or that you knew of, was that the company be required to dispose of the lands as they had heretofore disposed of them, for the purposes of use to those who had use for them?

A. I don't know as to the disposing of them as they were heretofore disposed of, but the general idea and desire, as I interpreted it, was to have them sold and disposed of at a reasonable price. I think there were a

great many thought they ought to be sold at $2.50 an acre, but a great many others didn't care."

Whereupon witness further testified that there was no particular desire, that he knew of, to have these timber lands sold to actual settlers. He never heard the idea advanced in the community that these lands could be utilized for actual settlement.

Whereupon the witness further testified as follows:

"Q. Would actual settlers have purchased these lands for actual settlement or for the timber that is on them?

A. I don't know how to answer that question. If they had been actual settlers they could not have been purchasing them for the timber that is on them. But if they had been purchased they would have been purchased for the timber that is on them.

Q. There occurred a protest in this case about actual settlers. We have some 7,000 in this record pretending, some of them, to have actually settled upon the best timber lands in the grant, and others to have applied for the very best timber-lands in the grant unsold, and for $2.50 an acre, in 160 acre tracts, and there have been some 7 or 8 applying for the same quarter section, according to the record. Now, would these lands have been purchased by men to settle on them, or for the timber, if they had been sold at $2.50 an acre?

Mr. Townsend: Objected to as incompetent, irrelevant and immaterial, and calling for a mere opinion of

the witness upon a matter that is not properly a subject of expert testimony, and the witness not being qualified to testify as to the intention of those settlers or their good faith or lack of good faith.

A. As far as the lands I am familiar with are concerned, they would have purchased them only for or chiefly for the value of the timber that is on them.

Q. You base that judgment upon the history of the disposition of the lands in the even sections of the same class, do you not, in part?

A. Largely, yes; the fact that I don't think they could do anything else with them, a big portion of them.

Q. You mean that they could only use them for the timber that is on them?

A. Until the timber was taken off.

Q. Their chief value, then, would be the timber?

A. I think so.

Whereupon on re-cross examination witness further testified that the first passenger or commercial train of the electric line went through to Eugene on the day this testimony was being taken, in September 1912. This line will not be used by the Booth-Kelly Lumber Company in the shipment of any of its lumber until or unless it is extended from where it is now. The electric lines have not, to his knowledge been used to any great extent for transportation of lumber, not in any quantities of consequence in any other part of the road where timber is being milled, nor does he know of its being transported

by means of electric lines, and he doubts whether that electric line will ever seriously compete with the Southern Pacific Company in the transportation of lumber or logs. The line from Cottage Grove to the Cascade Mountains is built and owned by eastern people and Mr. Hengen not by some of the mill men and does very little business other than transportation of lumber and logs principally which are transported to the Southern Pacific lines from the mills, from a point on the western slope of the Cascades, or in the foothills of the Cascades to Cottage Grove. In the immediate vicinity of Cottage Grove there are some twenty lumber mills and Cottage Grove does not buy the lumber transported over this other railroad, and that lumber must still be transported over the Southern Pacific to some other market. The line from Medford, which is constructed for a distance of about 25 miles, is up towards the Crater Lake country, Elk Creek. It is his understanding that the Hill Lines have constructed from a point four or five miles east of The Dalles, only on the opposite side of the river, connecting with the North Bank road southerly across the Columbia River by means of a bridge and then up the Des Chutes River, for the distance of about 150 miles, so there is a break between Bend, which is the southern terminus of the Hill line constructed from the north and the northern terminus of the Hill line that has been constructed from Medford of something over 100 miles—he does not know the exact distance. The Hill line as constructed and projected lies almost wholly east of the Cascades and it would not, under the present mile-

age that is built in the western part of the State be available for transportation purposes to the industrial plants or to the purchasers generally within the limits of this grant, from Eugene southerly to a point at least as far as Grants Pass or farther. He supposes it might be covered, but it could not be reached from the lines the Hill people now have or have projected as far as he knows anything of.

Whereupon complainant objected to all that part of the testimony of the witnesses Booth and Dixon inconsistent with the testimony of the witness Charles W. Eberlein upon the ground that the same was incompetent, irrelevant and immaterial and inadmissible because an attempt on the part of defense to impeach the testimony of one of its own witnesses. Whereupon complainant moved to strike out such testimony on the same grounds and it was stipulated that this objection and motion should be treated as if interposed to each question of each of the witnesses Booth and Dixon.

Whereupon F. A. ELLIOTT, called as a witness on behalf of defendants and being duly sworn, testified that he is 47 years of age, born in Illinois, resides at Salem, Oregon, and is State Forester. He has resided in Oregon since December 1888 and was appointed State Forester in April 1911 by the State Board of Forestry, composed of the Governor of the State of Oregon, and six other members, one of whom is George W. Peavy, head of the Forestry School at the Oregon Agricultural College, George H. Cecil, District Forester and four members appointed by the Governor, one

from the State Grange, one from the State Woolgrowers' Association and two from the Lumbermen's Association. He is now State Forester and is required, by virtue of his office, to make annual reports to the Governor. His duties are outlined in the law creating the State Board of Forestry. He has general supervision over the fire patrol of the State, including lands owned by private individuals and lands owned by the State and associations formed for fire protection. He made his first annual report to the Governor as State Forester December 1, 1911. His second annual report had not yet been published. "Defendants' Exhibit 360" is his first annual report as State Forester to the Governor for 1911, published by the State in 1912.

Whereupon defendants offered in evidence said "Defendants' Exhibit 360" to which complainant objected as incompetent, irrelevant and immaterial and hearsay and conclusions of the witness, which said exhibit was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence and identified herein as such.

Whereupon witness further testified that the statements made by him in that report are as nearly accurate as they have any way of getting at it, to which last named testimony complainant objected as last above and as not a proper method of eliciting facts within the knowledge of witness.

Whereupon witness further testified that he was employed by the Oregon and California Railroad Com-

pany in its Land Department beginning in the latter part of April, 1889 and continuing until May 1st, 1906. His duties while in such employment from 1890 until about 1896 or 1897 were that he was assistant land examiner and assisted in cruising and classifying the lands being sold at that time belonging to the Oregon and California Railroad Company, granted to it by the Act of Congress of July 25, 1866 and May 4, 1870. After about that date, he was the chief land examiner of the Company and in that capacity did about the same kind of work, excepting that he had charge of all the field work for the Company after that. He went on the lands and cruised them in 40 acre tracts. A great deal of this work he did himself and a great deal he had done by other parties under his supervision. He understands that the reports which he made as cruiser or which were made under his supervision while he was in charge, prior to April 18, 1906, were practically all burned in the San Francisco fire. He made written reports of lands that he cruised, to Land Agent Andrews and later, to Eberlein, and thinks this form of report was gotten up by Rees and himself. These forms of reports are all substantially the same. Prior to the fire the Company used a book with four pages to a section, giving room for a quarter section, then a 40 in this quarter and on the opposite page, form for the report. These books were probably 4x8 inches in size in blank and were bound and had enough pages to hold a township. When the book was filled it was turned over to the Land Agent and kept on file in the office. He does not think any one of

the reports was saved. Referring to "Defendants' Exhibit 259," witness testified that he cruised a great deal of the lands in all the different counties in which the land lies shown in this exhibit, unless it may be Curry County. He does not know that he ever cruised any in Curry County, but in the other counties, he has done a great deal of cruising, probably has been over as many different 40-acre tracts as any one else in the country. They used to have a classification of these lands, as timber, agricultural and grazing. The character of the land in general, is rough and mountainous; that is the land itself. These three classes were on these blanks and also had two classes when the lands were denuded of the timber, that is, they were called either grazing or agricultural land, when denuded.

To which complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of the witness relating to the character of the lands within the limits of the grant involved in this suit, settlements thereon and public land entries thereof, and it was agreed between the parties that this same objection shall be deemed taken to all the testimony of this witness on that subject.

Whereupon witness further testified that all lands that were considered unfit for cultivation were designated as grazing lands when denuded. Taking southern Oregon, beginning with Douglas County, there is a great deal of land, among the unsold portion, that is

barren, rocky or covered with chaparral or brush, practically worthless for any purpose, that was classed as grazing land, simply because it was of no value for anything else. It has more or less brush, chaparral and all kinds of brush on the land and is rocky, very rough land. There is more or less of that scattered all through the grant, back in the mountains and foothills. He presumes Douglas County has more than any other kind of this character, of worthless land, because there is more railroad land in Douglas County. Josephine County would probably have a higher percentage of that kind of land than any other county. Off hand he would say that 40 per cent of the lands in Jackson and Douglas Counties would be worthless. The heaviest and most valuable timber lands of the grants, are in parts of Columbia, Washington, Multnomah, Clackamas, Yamhill, Polk, Benton, Linn, Lane and Douglas Counties. There are tracts of pretty good timber in Jackson and Josephine Counties, also in Lincoln County. Coos County is a very heavily timbered County. The comparative stand of timber on the unsold lands, compares favorably with the timber on the even sections, and with the timber in western Washington and in other parts of the world. It is just about an average of the timber in this State, with the exception that some of the very heaviest bodies of railroad lands have been sold. Generally speaking, he is familiar with these lands conveyed to the so-called innocent purchasers by the Company, aggregating something over 400,000 acres and they are the choice selected timber lands of the grant, up to the time these sales

were made. There is a great deal of timber land in the grant which is left, that is substantially the same but at the time these sales were made, the land that was sold was more accessible. The remaining lands now probably would not run quite as good in the stand of timber, but these lands are becoming more accessible all the time, and at the present time (1912), these unsold lands would be practically of the same quality of timber.

Whereupon witness further testified as follows:

"Q. What, from your knowledge of the timber-lands of this company, both those now owned, and those heretofore owned and sold to these innocent purchasers, and from your knowledge of the timber-lands on the even sections in western Oregon, within the limits of this grant, and coterminous with the unsold portion, has been the highest market price paid for any particular body of this timber-land, quarter section or otherwise, where the sale was a bona fide sale, made in due course, the seller selling because he wanted to sell, didn't have to, the purchaser buying because he wanted to buy and was able to buy? What is the best price for any quarter section that you know of that has been paid?

A. Well, the best price that I absolutely know of was $10,000.

Q. Where was that situated?

A. That was in Lincoln County. I am not right sure—I will have to look at that map to see whether that is within the grant either. It may not be. No, it is not. No, this is outside of the grant.

Q. How far away from the exterior limits of the grant on the west?

A. About four miles. Now, let's see, just wait a minute. Well, I know of a claim, this claim I say that I know of, I had an interest in that claim. I know of that being sold for $10,000. But there are claims just to the east of that in Polk County, that was in 8—9, well, I don't know positively but I know of sales being reported in there at $8,000 to $10,000.

Q. What is the fair market value of these best quarter sections, depending upon accessibility or availability, nearness to logging streams or rail transportation, of the best unsold quarter sections of timber-lands of the company? What is the fair market value of those quarter sections?

A. The timbered sections of the grant?

Q. Yes.

A. Well, I presume it would be safe to say $3,000 anyway.

Q. On an average?

A. On an average, yes, sir.

Q. And what would be the best maximum price, in your judgment, of the best quarter sections?

A. Oh, $10,000. There are claims that I could pick out that I know would sell for that.

Whereupon witness further testified that he does not know just where the claims of the Lafferty defendants

so-called, John L. Snyder and about sixty-seven or sixty-eight others are located, but knows all granted lands in Columbia County quite well and has cruised quite a good deal of it. These lands are generally very heavy timber, of the rough mountainous country and he would think these quarter sections in this best timbered area would very easily average anyway $3,000 or $4,000. Some of them no doubt would bring a good deal more, but he does not know where these claims are located and has not been in there since they were located.

Whereupon witness further testified as follows:

"Q. Now, taking this grant in its entirety, and based upon your knowledge of the same, obtained by cruising that which you have cruised, and by examinations made by you as an examiner, and other means of ascertaining the character of the land in person, by traveling over the same on its trails, from your knowledge obtained in your official capacity as State Forester, and having supervision of the fire patrol of the timberlands of the State of Oregon, including these and the lands in the even sections as well, and taking into consideration all the knowledge that you have of these lands that are unsold, involved in this suit, that are shown on this Defendants' Exhibit 259 in colors in green, I wish you would state to the Court what per cent of that grant in your judgment, is suitable for actual settlement for agricultural or horticultural or other such purposes?

Mr. Townsend: Objected to as incompetent, irrelevant and immaterial, in addition to the general objection urged as to this class of testimony upon the special

ground that it asks the witness to pass an opinion as to what constitutes actual settlement within the meaning of this law, and further, that there is nothing in the law requiring that the actual settler shall be wholly dependent for his livelihood upon the products of the land settled upon, and therefore calling for a conclusion and opinion of the witness upon a question of both fact and law.

A. What per cent of the land is agricultural land?

Q. Yes, that would be available for any agricultural or horticultural use.

A. Well, I should say from five to ten per cent.

Q. Now, suppose, Mr. Elliott, that the company had sold these lands, or would now sell these lands in this grant, and particularly the timbered portion thereof, and that portion which is chiefly valuable for timber, to these so-called actual settlers, at $2.50 an acre, in quantities not exceeding 160 acres, and give them a good title to each quarter section, and these purchasers or actual settlers, having this title to these timber-lands should desire to make the best investment that they could make, the best disposition or use of the land which they could, what would become of the title to these lands, in the ordinary course of business? Who would acquire these lands, and for what purposes could they be used, and would they be acquired, if you know?

Mr. Townsend: That is objected to, not only on the general grounds urged to all testimony relating to the character of lands, but particularly upon the ground

that it calls for a mere speculation or opinion of the witness as to what would become of the lands if the Railroad Company had obeyed the law, which is not a proper subject for expert opinion.

Q. You may answer.

A. What would these lands be purchased for? Was that the question?

Q. Yes.

A. They would be purchased for the timber, no doubt.

Q. What would become of the title to these lands? Where would the lands go shortly?

A. They would go into the large timber holdings. Of course, occasionally, a man might log a quarter section off himself, and keep the land, but it would be very seldom that that would happen.

Q. From your knowledge of the disposition of the lands in the even sections, coterminous with these, where title had been acquired under the Homestead Act or under the Timber and Stone Act, or other public laws of the United States, what has become of the lands in the even sections, where patents have been issued by the United States to these various parties, mainly?

A. It has very largely gone to large timber holders. Of course there are claims scattered all over the country that still belong to the original claimant.

Q. What is the chief value of these lands that have a value?

A. It is timber.

Q. Now, there has been some testimony in this case that some of these lands have been classified by the cruisers of the company as grazing lands, and especially after they have been denuded of the timber. What uses, if any, could these so-called grazing lands be put to, and in what way can they be said to be grazing lands, and what is the class of lands that you have classified as grazing lands, other than these worthless lands that you have spoken about already?

A. Well, the reason for classifying the lands as agricultural or grazing lands when they were denuded, was simply for the purpose of having a classification. Now, there was a time when we thought that all the land when it was denuded would either have to be used for agricultural or grazing purposes—That is all the uses we knew of for it. But under present conditions, and since the National Forests have been created, these lands largely, very largely, should be used for growing timber on.

Q. What do you mean by that?

A. It should be kept as permanent timber-land. Nearly all the lands in this grant are lands that should be used for growing timber.

Q. You mean reforestation?

A. Yes, resforestation.

Q. I will ask you to state whether or not these people who have logged off their lands, these large timber

owners, who have manufactured their timber, cut off their lands, have determined yet what to do with the logged off lands, if you know.

A. Very few of them have. Of course, there are some lands that they are clearing up, and putting into cultivation. Take along the Columbia River and places where it is susceptible of cultivation, they are using it. But otherwise it has generally grown up to young timber or brush, and not being used at all.

Whereupon witness further testified that it would take 50 to 75 years for second growth Douglas Fir to become saw timber from the time it is planted or seeded until it is merchantable. Reforestation of these timber lands after the timber has been once removed is impracticable under the present tax system, but he thinks the tax system should be changed so that it would be very practicable to reforest these cut over lands. The best use, in his judgment, to which the majority of these logged off lands could be put would be to grow more timber. These burnt over lands offer very little pasturage. He does not know how many acres it takes to keep a cow, but it takes quite a little and the main trouble is the young growth of timber or brush grows so fast that it chokes the grass out. There are places along the little creek bottoms where if they kept stock on it and kept the brush down very good grass grows, but taking the general run of the lands through the mountains, it grows up with brush and there is very little feed on it. The parcels of these lands suitable for some agricultural or horticultural purposes shown in the tabulated state-

ments, "Defendants' Exhibits 343 and 344" are generally in small patches, from an acre to a few acres, little creek bottoms or level benches, what are called bench lands, scattered all through.

Whereupon witness further testified as follows:

Q. Suppose that an actual settler, or person denominated as such in this record, should apply to the company for the purchase of a quarter section of this so-called grazing land, that is, land that is not chiefly valuable for timber, and the company should sell this quarter section to him, at the maximum price of $2.50 an acre, or less, and he should be expected to go out upon the property with his family, if he had one, support himself or his family by having this 160 acres enclosed, pasturing his stock on this 160 acres, if he has any stock, make his living for himself or his family, and a home there, what, in your judgment, would be his ability to do that?

Mr. Townsend: Objected to as purely speculative and argumentative, restricting the actual settler to a ridiculous life of inactivity and laziness, not contemplated by this statute.

A. Well, I don't know of any quarter sections, don't call to mind any, that I think a man could make a living on. In fact, I know of quite a number of places where 40 and 80 or 160 acres have sold a number of years ago, generally to fill out a piece of land, maybe a little fairly good land on this, to fill out a quarter section on Government land, for instance; but I don't call to mind now any quarter section that the company has

ever sold since I have been with them that a man has gone onto it and actually made a home, and made a living on that quarter section.

Q. Suppose that the company would sell one of these best quarter sections of timber-land to this so-called actual settler, at the maximum price of $2.50 an acre, and he should be expected to go out on this land to make a home for himself and his family, if he had one, what, in your judgment, would be his ability to make a living, for himself and his family on this timbered quarter section?

A. It would be impossible.

Whereupon witness further testified that there are very few, if any, entrymen who took homesteads within the limits of this grant on the even sections on the timbered area on the lands at the present time. They stayed on the lands long enough to get title to it and have abandoned it and their improvements have gone to rack lots of times, and generally you might say they have no improvements left on them. The improvements in the beginning were just make shifts as a general thing. Occasionally one would find a claim with pretty fair improvements, maybe 5 or 10 acres in a fair state of cultivation, but this is largely now grown up to brush. These lands in the timbered portions of the even sections thus homesteaded are now largely owned by large timber owners. To the best of his knowledge, he believes he has not worked for the Oregon and California Railroad Company any since May 1, 1906. He

worked some in California for Eberlein and McAllaster since 1906, on the other grants in California. He does not recall when he cruised the lands described in "Defendants' Exhibit 355" but thinks he did a little work for Rees sometime since 1906, possibly this is the work he did, but it had slipped his memory. This appears to be the only tabulated statement made from any cruisers reports made by him now in the possession of the Railroad Company. He cruised a great deal of these lands. He has no official or business relation with the Oregon and California Railroad Company or with the Southern Pacific Company or any of their affiliated or associated lines. He recognizes "Defendants' Exhibit 361" entitled "Professional Paper No. 4, Series H, Forestry 1, Department of the Interior, United States Geological Survey, Charles D. Walcott, Director, The Forests of Oregon, by Henry Gannett, Washington Government Printing Office 1902," and the map in the pocket entitled "Map of the State of Oregon showing the classification of lands and forests," as an official document and map issued by the Department of the Interior. This map has had quite a general distribution throughout the State. He has one of them. A. J. Johnson referred to was in the Forest Service of the United States, he thinks, but he does not know who he was.

Whereupon defendants offered "Defendants' Exhibit 361" in evidence to which complainant objected as incompetent, immaterial and irrelevant and as consisting of a mere statement of opinion of the compiler of

the document based upon information not under oath.

Whereupon "Defendants' Exhibit 361" was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence and identified herein as such.

Whereupon upon cross examination witness further testified that he is a witness under pay as an ordinary witness and has no other compensation, or promise of any other compensation.

Whereupon witness further testified as follows:

Q. You saw me in the summer of 1907 here at Portland in this very building, did you not?

A. I think I did.

Q. And you made a statement to me concerning the general subjects that you now have covered by your testimony, did you not?

A. I think so, yes.

Q. And as you gave me that statement, I dictated it to a stenographer, did I not?

A. You said you were having it dictated. Did you have it all dictated, all the conversation we had?

Q. I am asking you if you did not see me dictate it in your presence, did you not?

A. Well, I think you did, yes.

Q. You heard me, didn't you?

A. Yes, sir.

Q. And you saw the stenographer taking it down, didn't you?

A. Yes, sir.

Q. And it was transcribed on the typewriter and submitted to you before you left, was it not?

A. I don't think so.

Q. Will you swear that it was not?

A. I don't think it was.

Q. You swear that you never saw that statement after it was reduced to writing on the typewriter?

A. I don't think I ever did.

Q. You swear that you never read it over?

A. Well, I don't remember of reading it over.

Q. How many times did you visit my office with reference to those interviews?

A. Once, is all I ever remember of.

Q. Don't you remember that you visited it there once when it was dictated, and afterwards came back and saw the typewritten statement, after it was reduced to writing?

A. No, I don't remember that. I might have, but I don't remember it.

Q. I will ask you to examine this document, and state if that is not the statement as you made it to me at that time, and as I dictated it in your presence, and which was shown to you on the same day after it was reduced to writing?

A. I don't think I ever saw that in that form.

Q. I ask you to read it, and state whether you did not make the statements to me as set forth in that document, in the Postoffice Building in the City of Portland, in the State of Oregon, at about the month of August, 1907?

To which examination upon this subject defendants objected as incompetent and as not impeaching evidence or a proper method of attempting to impeach the witness as a narrative or purported narrative of a past conversation.

Whereupon witness further testified as follows:

A. What is the question you want me to answer now?

(Question read.)

A. I say that I did have a conversation with you, in which I made some of those assertions, but I don't think they are taken down as I gave them to you.

Q. I wish you would point out what portion of this statement does not correctly set forth the statement made to me by you at the time that I have indicated in my former question.

A. What is the question?

(Question read.)

A. Well, I might simply state that the conversation I had with you at that time was very largely the questions and answers were all made by yourself. I came in—you wrote to me once or twice to come down,

wrote me finally to come down at your expense, and I happened to be in town, and I came in to see you, and I began to give you a little history of my work with the company, and some of this is fairly accurate as to what I said. But it is very largely answers that you made out yourself to questions that you had already asked. You began with the assumption that, as I was not with the Railroad Company at the time, of course I had a grievance, and would open up and give you any information that I had. And furthermore, when I went on to state, and I see you have got portions of it here fairly accurate about the grades of the land—now, in cruising the land and grading it as agricultural and grazing lands, etc.,—you have that fairly accurate. But I remember very distinctly that as soon as I began to answer the questions and answering them in my own way, you began to answer them in your way, and asked me if that was not so and so, and to get out in a nice way with you, I let you answer to suit yourself, a great many of these questions.

Q. You have not played the same game here to-day, have you?

A. No, sir, I am under oath now. You told me at that time—you were very insistent on this—now, this is not under oath; this is just a general statement. Oh, there is a good many of these statements that are all right.

Q. Isn't it a fact, Mr. Elliott, that I told you that I was not in the affidavit getting business, and that I

did not care to take your affidavit, but that I wanted truthful information concerning the history of this grant, and your knowledge of it?

A. I don't know about that. I don't remember that detail.

Q. Do you mean to say that I kept cautioning you that you were not under oath for the purpose of getting you to state things that were false?

A. No, I did not say that.

Q. Did you say anything to me at that time that was false?

A. Not—no, I don't think I did.

Q. Well, do you say that in order to please me, when I asked you if things were so, that you agreed to them if you knew they were false?

A. Well, I say this: that you began with the assumption that I was going to give you a lot of information, and lots of information you tried to get out of me that I did not know anything about, but when you would ask a question, you would give the answer to it yourself, and I would let you go ahead and answer. Haven't you seen people that you would do that way with? I have, and you were one of them.

Q. That is your only explanation of that general statement, is it?

A. Yes, sir.

Q. That when you find anybody that wants you

to give certain answers, you will do it. will you?

A. Well, there are times when I will, yes.

Q. Why would you give it to me at that time?

A. Well, just because from the general way you began to ask the questions.

Q. Now, sir, is it not a fact that I discussed with you every statement that is made in that document, and having gotten from you your version of it, I then dictated it, sentence by sentence, to the stenographer, and turned to you and asked you if that was correct?

A. I don't think so. I don't remember that at all.

Q. Did I dictate that entire statement without asking you as to the character of the statement as I went along?

A. You dictated this from our conversation. We talked along, and you would turn and dictate to your stenographer.

Q. After I had discussed a given subject or question with you, I would then turn and dictate the substance of it to the stenographer, did I not?

A. Well, the substance as you interpreted it.

Q. Did you not agree to it at the time?

A. I don't think so, any more than I would say "Let it go at that."

Q. Do you swear that you ever used the expression "Let it go at that"?

A. No, I would not say that I did.

Q. Will you swear that you ever in any way indicated to me that anything I dictated to the stenographer was not absolutely true?

A. No, I would not.

Q. Did you sit there and deliberately let me dictate to that stenographer things that were not true?

A. Well, if this is what you dictated, I surely did, but I don't think this is what you dictated and read to me.

Q. I thought you said I did not read it to you.

A. Well, you say you did, though, and I say I do not think that if this is what you say you dictated and read to me, I do not think you ever did.

Q. Well, did I read anything to you at that time?

A. I don't think you did. I believe you just simply dictated to the stenographer and fixed this up afterwards. I don't think I ever saw that paper in that form. I am sure I never did. I don't think I was ever by you to me at that time.

Q. I want you to go ahead and answer my former question, and point out the portions of that document that you say do not correctly set forth statements made by you to me at that ime.

Mr. Fenton: Same objection as made before last above, that this would be an attempt to prove hearsay declarations of Mr. Andrews and other officers of the company, through the mouth of this witness, under the pretense of impeaching the witness, and it is therefore

incompetent.

A. Well, now, here is a statement here now, it says, "From Mr. Elliot's conversation, it is certain that Mr. Andrews, and those conducting the land business for the company, understood about the Act of 1869 which limited sales to actual settlers in limited quantities and for a limited price." Now, you don't say that I said those things, but you say from the conversation it is certain.

Q. Well, did you not, in substance, tell me that Mr. Andrews and the other persons named there did know about——

A. I don't think I ever did.

Q. Let me finish my question, please.

A. Well, go ahead.

Q. Did know about the restrictions of the grant.

A. I don't think I did.

Q. Well, go on with the next portion of that statement that you deny having made to me at that time.

A. Here is another one. "It is apparent that Andrews and Mills understood this point, and that they endeavored to dispose of as much of the land as they could before they were stopped, commencing about 1892, because as soon as there became a brisk demand for timber-lands, the policy of the company seemed to change from trying to dispose of agricultural lands to that of making a special effort to find purchasers for timber-lands, and the timber-land sales were exploited

thoroughly."

Q. Do you deny having made that statement to me?

A. You do not say here that I made it. You say "it is apparent from the conversation."

Q. I ask you the question, do you deny having made that statement, in substance, to me at that time?

A. Yes, I do. I do. Here is another statement: "Mr. Elliott thinks that in time fully 50 per cent of all the lands now held by the railroad company will be valuable chiefly for the growing of fruit, vegetables and other farm products." I do not think I made that statement.

Mr. Fenton: What is the answer?

A. I say in here it says: "Mr. Elliott thinks that in time fully 50 per cent of all the lands now held by the railroad company will be valuable chiefly for the growing of fruit, vegetables and other farm products." I do not think I ever made such a statement.

Q. Well, do you deny that you made that statement?

A. Yes, I do.

Q. You swear positively, do you, that you did not make that statement, in substance, as set forth in the document which you now hold, and which you have read?

A. I do.

Q. At the time that I have stated, that is, at about

the month of August, 1907, and in the old Grand Jury room of the Post Office Building of the United States, in the City of Portland, in the State of Oregon, you deny having made that statement to me, do you?

A. I do. And I will tell you, I will make a little explanation of that. I do remember you asking me the question about what per cent of the lands were agricultural, in the grant as now held by the company, and I said that there was none of it, practically none of it, from the fact that the agricultural lands were taken up before the company got their grant, and that prior to this time the company had sold to actual settlers, wherever they had any improvements on the land, or wanted to buy a small portion of land adjoining their holdings, they had bought it up, and at the present time there was practically no agricultural land in the district, in their grant, although I said that there was occasionally a patch all through these large timber holdings, that might be considered as agricultural land—small portions—and also that there was quite a proportion of it that was only valuable for grazing lands. Then you made the broad interpretation of agricultural lands as including these grazing lands. Now, you said, "Supposing that you call agricultural land what you call grazing lands—grazing is a department of agriculture, that comes under the head of agricultural."

Q. I said that to you, did I?

A. You said that to me.

Q. You remember that distinctly, do you?

A. I remember that.

Q. And you swear to it now, do you?

A. I do, yes, sir, I swear to it. And I said, "Well, that would make quite a difference, because there is a great portion of it that has always been considered as only valuable for grazing lands." But as to saying that even that portion would amount to 50 per cent, taking the grazing and agricultural lands together, I might possibly have made that assertion. But I think it is pretty large. This next statement here: "Mr. Elliott thinks that there were quite a number of instances where people had actually settled on railroad land, and wanted to buy the land for agricultural use, but were too poor to pay the price which the company demands, and were, for that reason, prevented from acquiring the land. In these instances, the price was very much in excess of $2.50 per acre." Now, I am positive I never made any such assertion as that. But I did tell you that wherever there was an actual settler on the land, the Railroad Company had always, so far as my knowledge was concerned, refused to sell that land to any one else but the actual settler, and in very many cases, where it was just simply a forty acres adjoining their homestead, if they had a little fence on it, a little piece of it in cultivation or fenced in as pasture, wherever that came to our knowledge, the Railroad Company refused to sell that to any one but the actual settler.

Q. The question is do you swear that you did not

make the statement you have read as set forth in that document?

A. I do. I say that I did not make that statement. (Hands back statement to counsel.)

Q. Is there any other portion of this statement that you deny having made to me at the time and place that I have indicated?

A. Well, there are several little places in there where I don't think I made it just exactly. I think you have given it a different interpretation from what I did.

Q. I want those pointed out. That is what I asked you to read it over for.

A. All right, sir. I will do that. Now, this statement here, Mr. Townsend. I don't know just what—it says. "The general instructions with reference to cruising were substantially the same during the entire time Mr. Elliott worked for the company." This statement here, now, "but the use to be made of the cruising apparently changed as the demand for timberlands increased." I don't know what could be meant by that, and I don't know why, if I did make such a statement, I don't know why it should be made. "But the use to be made"—because the use of these cruises was always the same. It does not make any difference what they were looking for, whether they were looking for agricultural lands, or what they were looking for, the actual cruise of the lands, you know, was made for the purpose of classifying and appraising the lands; always was

that; and I don't know why that statement should be made in there, "but the use to be made of the cruising apparently changed as the demand for timber-lands increased." The use of it—I surely would not make such a statement as that, because the purpose of all these cruises was to ascertain the character and the value of the land.

Q. Do you deny having made that statement to me at that time and place that I have indicated in my former question?

A. Why, yes, I do, because the use of these cruises has always been for the same purpose. I surely never would make an assertion like that. Now, "The efforts to sell were to meet the condition then existing, which was that sales could be made to none except those who wished the land for agricultural or grazing use." I probably made that assertion there, but that was not to intimate that the company could not sell for anything but that, but that there was no sale for anything but agricultural or grazing use.

Q. I am not asking you to explain any of these statements made in there, but I am asking you whether you made them.

A. Well, I probably made that one, yes. I think that is about all that I would say.

Q. With the exceptions that you have noted, is it not a fact that you did at the time and place that I have mentioned make the statements set forth in this document?

A. I probably did, in substance, as you have it there.

Whereupon complainant offered in evidence as a part of the cross examination of witness the document last referred to in his examination as "Government's Exhibit 122" to which defendants objected upon the ground that it is a narrative or purported narrative based upon an alleged conversation between witness and Mr. Townsend and contains attempted or purported conclusions of Mr. Townsend from the conversation with the witness and is hearsay and not impeaching testimony and the document is unsigned and not a statement of the witness but the statement of counsel based upon his understanding of what witness may have said and is therefore incompetent, irrelevant and immaterial.

Whereupon defendants also moved to strike out said document for the same reasons which said "Government's Exhibit 122" was received in evidence and is as follows:

"GOVERNMENT'S EXHIBIT 122.

"INFORMATION RECEIVED FROM F. A. ELLIOTT.

"Mr. Elliott now lives at Newberg, Oregon. In the fall of 1888, he came from Illinois to Oregon, and in the spring of 1889 was employed as a member of the cruising staff of Mr. N. E. Britt, who was the chief land examiner of the Ore. & Cal. R. R. Co. Mr. Elliott commenced work in May, 1889. Just before starting out upon the cruise, Mr. Elliott overheard a conversa-

tion between Britt and Mr. Andrews, the acting land agent, and Mr. Andrews said, in substance, that he hoped Britt would find a lot of agricultural and grazing lands this trip, to which Britt replied that he hoped he would find a lot of good timber land, the same as he did the year before.

"Mr. Britt had been in charge of a cruise conducted by the railroad company the preceding year, the work being done in the Mohawk Valley, in Lane and Linn counties, in the viciniity of the Cascades. From information then and afterwards received, Mr. Elliott learned that the first general cruising done by the company was commenced in 1888. Prior to that time, what cruising had been done was for the purpose of individual sales.

"Mr. Elliott continued in the service of the railroad company from May, 1889 until May 1, 1907. The first two years Elliott worked as compass man with one of the crews. Then he became an estimator, and worked in that capacity with others for about seven years, when he became chief cruiser, in which capacity he served the company for the last nine years of his service. During the course of his employment, Mr. Eliott visited every portion of the grant, and there are but few townships which he has not examined in whole or in part.

"The general instructions with reference to cruising were substantially the same during the entire time Mr. Elliott worked for the company, but the use to be made of the cruising apparently changed as the demand for timber lands increased. When Mr. Elliott first started to work, there was practically no demand for

timber lands. Speculation in any of the lands was very rare. The efforts to sell were to meet the condition then existing, which was that sales could be made to none except those who wished the land for agricultural or grazing use. The theory of Mr. Andrews seemed to be that the company's principal chance of selling the land was to settlers who desired to cultivate it, or use it for grazing purposes.

"The general plan of the cruising was to ascertain first whether the land was timber land or not, and if timber land, whether the land was valuable for agriculture or grazing after the timber was removed. The same report was made with reference to the lands which had no timber. Agricultural lands were graded No. 1, 2 and 3, and grazing lands had the same grades. The theory of Mr. Andrews, as quite frequently expressed, was to find large tracts available for agricultural use and then induce settlement of large colonies, and disposing of the land to the members of the colonies. The lands were cruised with this purpose in view until the demand for timber began. This was in about 1892.

"Down to that time, there had been practically no demand for timber land for the timber itself. But the demand for timber land increased quite rapidly from 1892, and within the course of five or six years, there was a very heavy demand for timber lands by mill men and by lumber men, generally for speculation, as well as for actual milling use. Large lumber men from Wisconsin, Michigan, Minnesota and other eastern states came west in the years following 1892 and made large

purchases.

"Mr. Elliott says that until about 1892, the railroad company did not believe that the timber lands had any value which could be realized out of them for many years. That Mr. Britt, in cruising the lands in the Mohawk Valley in 1888, found large timber lands, and called the attention of Booth-Kelly people to them, and finally induced them to buy, and this was about the first sale of timber lands in any quantity, and was possibly made in the year 1891 or 1892.

"From Mr. Elliott's conversation, it is certain that Mr. Andrews, and those conducting the land business for the company, understood about the Act of 1869 which limited sales to actual settlers in limited quantities and for a limited price. This question was discussed some during all the time Elliott worked for the company. It is apparent that Andrews and Mills understood this point, and that they endeavored to dispose of as much of the land as they could before they were stopped, commencing about 1892, because as soon as there became a brisk demand for timber lands, the policy of the company seemed to change from trying to dispose of agricultural lands to that of making a special effort to find purchasers for timber lands, and the timber land sales were exploited thoroughly. During all this time, it is a fact that Mr. Andrews got as much for the land as its then market price. He was better informed than most of the timber owners, and was able to sell in large quantities; and taking advantage of these conditions and his knowledge, he constantly demanded the

top market price for timber lands.

"There was never any effort made to obey the conditions of the Act of 1869. Everything was done to sell the land as rapidly as possible in as large quantities as possible and for as high a price as possible without reference to the character of the purchaser or the use he intended to make of it.

"It was quite generally supposed and particularly by Andrews and the other railroad men themselves, that the eastern speculators were paying more for this timber land than they could get out of it for many years to come.

"The cruising was continued without reference to sales so as to include the entire grant as rapidly as possible, and the entire grant was practically all cruised by 1906 or 1907.

"Indemnity lands were cruised prior to selection for the very purpose of giving the company information to enable it to make intelligent selections. This does not mean that indemnity lands were all cruised before selection.

"Shortly after Mr. Harriman got control of the road in 1901, Mr. Eberlein came to the coast and organized the land departments of the different railroads in the Southern Pacific system. One of the first things he did was to stop sales and took the matter of sales entirely out of the hands of Mr. Andrews and Mr. Mills. The entire land business was checked over under Mr. Eberlein's direction. Mr. Eberlein expressed one of his

reasons for this, because he frequently said that Andrews was selling lands at much less than their actual value.

"Mr. Elliott does not know anything with reference to any instructions Mr. Eberlein has had from superiors, but recalls that the sales were stopped just about the time of the oil boom in California.

"Mr. Elliott remembers Eberlein explaining his reason for stopping sales by saying that he desired to acquire personal familiarity with the lands and their values before any more sales were made.

"Mr. Elliott remembers distinctly that there was a very marked change in the manner of land sales at about 1892. Prior to that time, there were practically no sales except to actual settlers in small quantities and for agricultural use. Then the demand for timber land began and developed very rapidly, and from that time on, nearly all of the sales have been of timber lands to timber men and speculators in large quantities and at prices considerably in advance of those obtained before.

"Mr. Elliott states that he is familiar, in a general way, with the lands in most of the large sales, and that all of the large sales contained some lands which had been reported to the company as valuable for agricultural use after the removal of timber, and some of the sales contained a considerable quantity of such lands.

"The character of the land and its susceptibility for agricultural use was apparently never considered. Sales were made in large quantities to the timber speculators of any of the lands without regard to their agricultural

character. The company never refused to sell lands to timber speculators where the price was satisfactory on the ground that the lands were capable of settlement. In a great many localities the Government land adjoining the timber land sold in these large quantities was actually under cultivation by settlers growing fruit, vegetables and other farm product. This had progressed to a limited extent because all of the country was undeveloped and settlers were just commencing to come in. Mr. Elliott thinks that in time fully 50 per cent of all lands now held by the railroad company will be valuable chiefly for the growing of fruit, vegetables and other farm products.

"Mr. Elliott thinks that there were quite a number of instances where people had actually settled on railroad land and wanted to buy the land for agricultural use, but were too poor to pay the price which the company demands, and were, for that reason, prevented from acquiring the land. In these instances, the price was very much in excess of $2.50 per acre.

"The general instruction of all the cruising was to ascertain the actual value of the land for all purposes, and Andrews endeavored to secure a liberal price for all the land. In fact, tried to get all that could be gotten out of the land.

"Mr. Elliott remembers very well the sale to Hammond & Winton in Tillamook county. It was a well known transaction at the time, and is the largest sale the railroad company ever made. There is absolutely no

doubt about the genuineness of this sale in 1901. Mr. Elliott and Mr. Britt together conducted the cruising of this land.

"The earlier contracts, even for timber lands, were, about all of them, ten-year contracts, and as the sales increased, Andrews took advantage of the increased demand and shortened the time of payment so that the latter ones were for seven years and some even for five.

"Mr. Elliott is confident that the railroad company never relinquished any forest reserve lands under the lieu selection law. The land in the forest reserve was sold by the company, and the purchasers made lieu selections.

"There was no substantial amount of agitation of the rights of the company to sell in quantities greater than 160 acres until during the past year. When the matter would be mentioned in the presence of Andrews, he would ignore the question and say that it was all tommy-rot or evade it in some such manner as that.

"Mr. Elliott thinks that there is about 2,600,000 acres left in the grant unsold, but this includes unpatented lands and unsurveyed lands, and Mr. Elliott is not very certain just how much of the land is unsurveyed.

"Mr. Elliott has just completed cruise of Polk county railroad lands, and examined practically 193,000 acres and cruised it at nearly 7,000,000,000 feet of merchantable timber at a valuation of about $5,000,000.00. Mr. Elliott thinks the timber alone on the remainder of the grant now owned by the railroad company is worth

from thirty to fifty millions of dollars, and this is on a conservative estimate of quantity, as well as price.

"The Southern Pacific Company is running three mills in Lane County. They cut everything and make it into ties, bridge timber and other timber generally."

Q. Do you remember who were present at the time you had the conversation with me and that I dictated a statement to the stenographer as the conversation proceeded?

A. I do not.

Q. Do you remember who the stenographer was?

A. I do not. I don't think I knew at the time. I probably did not.

Q. Was it a man or a woman?

A. Well, I think it was a woman, but I would not be positive of that.

Q. There were three or four other persons in the office at the time, were there not?

A. Yes.

Q. I had something like five or six clerks there?

A. Yes, probably, and a door-keeper.

Q. A door-keeper?

A. Yes, some man standing at the door to introduce me.

Q. Do you swear to that, Mr. Elliott?

A. I think I would, yes.

Q. That I ever had a door-keeper, or that anybody ever stood there to introduce you or anybody else?

A. Well, I was thinking there was a man there, I would not be positive of that.

Q. Well, why would you be mistaken on that?

A. Didn't you have a door-keeper, one that ushered people in?

Q. Never had in my life, here or anywhere else.

A. Well, I may be mistaken on it then.

Q. Why could you be mistaken on a point of that kind, if you are attempting to tell the truth here?

A. Well, I was under the impression that there was a man there to usher people in and out.

Q. Any reason why you should imagine anything of that kind?

A. No, sir, none whatever. That is just my recollection of it. It might have been one of your clerks.

Q. You say he was a big door-keeper, do you, too?

A. He was big—there was a big man there, I remember. It might have been one of your clerks. I don't know who he was.

Q. Fulkerson weighed 110.

A. No, there was a larger man than that there.

Q. How many rooms did I have there?

A. I don't know. I was only in one room, I think.

Q. It is a fact, isn't it, that as I discussed this sub-

ject with you, I dictated it in my own narrative, as this statement shows, and not in the first person for you to sign. That is true, is it not?

A. You were dictating, talking to a stenographer there all the time. I didn't know whether they were taking it all down, and apparently they did not take it all down. That is, the conversation as we talked it.

Q. Well, is it not a fact that I would discuss a subjest with you for some few minutes, and then turn and dictate a sentence or two embodying the substance of our conversation?

A. That is what I thought you were doing, yes.

Q. Well, you heard what I dictated, didn't you?

A. I think I did at the time, yes.

Q. Did you correct me in any particular?

A. I don't remember now at all. I do remember asking you at one time if you were having it all taken down, the questions and answers.

Q. Do you not remember that, in response to that, I told you that we would discuss each subject until we had agreed upon the form of the statement, and that then I would dictate it to the stenographer, and that that plan was carried out?

A. I don't remember that at all. You might have said it.

Whereupon witness further testified that he left the employ of the Railroad Company May 1st, 1906, to take

other employment. He was not dismissed from or requested to leave the service and it is not a fact that he and Mr. Britt were both dismissed from the service at that time. He thinks he has a copy of his letter of resignation, not with him, but he thinks he can produce it and the answer from Eberlein at the time, stating that he was sorry that he saw fit to quit. He has never been discharged from any employment of the kind. He does not think he ever told any one that he had made a statement to Mr. Townsend, counsel for the complainant, concerning this case, and he never told any of the employes or attorneys or officers of the Railroad Company, that he had made a statement; he may have mentioned the fact to Rees, but never to any attorney or any one else, since this trial began, meaning since the testimony was being taken, when he was here a month ago. He may have done some work for the Railroad Company in the summer of 1907 but thinks 1908 was the first time after 1906, when he cruised Polk County. That fall he worked for a pulp and paper company in California and Nevada and may possibly have worked for the Company some in 1907, but he thinks it was not until 1908. When he left the employ of the Railroad Company—May 1906, he went to work on the county cruise of Polk County for the County Court of Polk County for assessment purposes. He cruised everything in that county, that was timbered. He did not examine other lands excepting to see that they were not timbered. They would take a township, where it was all timbered and would naturally cruise all of it. This took him five or six months and

he had six to fifteen people assisting him, a crew all summer of from six to fifteen men under the direction of himself and Walter V. Fuller, the man who had the contract with him. They had made a contract with the county, to cruise these lands. Mr. Fuller has already testified as a witness for the Railroad Company in this suit, as he has been informed. Fuller had been cruising lands before they undertook this work. Fuller was in the timber business, buying and selling timber but not associated with him. This cruising for Polk County, is the first association they had ever had, in a business way. He did not quit the Railroad Company for that work, but because he thought he could do better, working for himself, than on a salary. He does not remember what time in the fall of 1906, but it was probably in September that they got through cruising the lands in Polk County. After that, he went to California to work for the Floriston Pulp and Paper Company who are practically the same people who own the Crown Columbia Pulp and Paper Company at Oregon City. He worked there in California until the fore part of December, when he came home. The next year he and Fuller did a little buying and selling and cruising for other people, part in Polk and Lincoln Counties for about a year. He does not think he worked for anyone on a salary during the summer of 1907. He thinks they were doing a little timber business during that year. The first work he did, after this work that he and Fuller did in 1907, was probably for the Central Pacific Railway Company in California, but he is not positive about that.

He thinks he worked during the summer of 1908, probably 4 or 5 months, in the employ of Eberlein a short time and later in the employ of McAllaster. He does not think he was there when McAllaster came in September 1908. He only had worked a month or so for Eberlein that summer but it might have been in the summer of 1909 that he worked for McAllaster 4 or 5 months. He only worked a short time for Eberlein, if it was in 1908. Eberlein is the man who had charge of the Oregon and California Railroad land grant in Oregon at the time witness resigned. Eberlein wrote him, that he had some special work for him, to do, down in California and he came down there to do it for him and probably worked a month or six weeks in all for him at that time cruising and checking up a trespass that a timber company had made on the railroad land. When he went to work for McAllaster the next summer, in 1909, he was making a preliminary cruise of the timber in northern California in Siskiyou County and was employed probably four or five months. That was the last work he thinks that he did in California. When he got through in California he came up to Oregon and did a little work in this grant that same winter, until about February and since that time he has not done any work for the Company. That is probably the time he did this little work in Clackamas County, in February 1910, that he had forgotten about. Since that time he has not done any work for the Railroad Company.

Whereupon witness further testified as follows:

Q. Now, upon what do you base your testimony

that I assumed that you had a grievance against this railroad company when I had my interview with you?

A. Just from the way you began talking to me.

Q. Well, what did I say?

A. Well, you said that, the way I remember now, I don't say—I wouldn't swear that this was just what you said, but that "you are out of the employ of the company now, and of course you,"—now you didn't say this just in this many words, but you intimated that, of course, I would tell all I knew about it, about the company.

Q. Well, was there any reason why you should not?

A. I didn't know that there was.

Q. Was there anything that I said there to indicate that you would tell anything that was not true?

A. Well, I don't know if there is, only I think you misinterpreted a good deal of the conversation.

Q. Well, isn't it a fact that instead of assuming that you would tell anything that was not true, I simply stated to you that I assumed, from the fact that you were out of their employ, you would tell the truth about it? Isn't that all there was to it?

A. Well, I don't know.

Q. Isn't that true?

A. State that question again.

(Question read as follows): Well, isn't it a fact that instead of assuming that you would tell anything

that was not true, I simply stated to you that I assumed, from the fact that you were out of their employ, you would tell the truth about it? Isn't that all there was to it?

A. Well, I don't know as that would be the natural assumption at all.

Q. Well, didn't you swear a few minutes ago that I said to you that now you were out of the employ of the Railroad Company, I assumed that you would tell all you knew about it? Didn't you swear to that?

A. How is that? State that question.

(Question read).

A. I don't think I did.

Mr. Townsend: Please read that answer back a page or two.

(Answer read as follows): "Well, you said that, the way I remember now—I don't say—I wouldn't swear that this was just what you said, but that 'you are out of the employ of the company now, and of course you,'—now, you didn't say this just in this many words, but you intimated that, of course, I would tell all I knew about it, about the company."

Q. Did you not a few moments ago testify in answer to a former question of mine, that I said to you in substance that you were out of the Railroad Company, and I therefore assumed that you would tell all you knew about the company?

A. I think I did, yes.

Q. Well, why have you changed your mind? Did you not testify in answer to two or three questions back, that you did not so testify a few moments ago?

A. I don't think I did.

(Question and answer read as follows): "Q. Well, didn't you swear a few moments ago that I said to you that now you were out of the employ of the Railroad Company, I assumed that you would tell all you knew about it? Didn't you swear to that? A. I don't think I did."

Q. Did you not testify a few moments ago just as the Examiner has now read to you?

A. Is that the same question he asked before? The first testimony was there that from your conversation I thought that you assumed this. I didn't say that you said this, but I said that from your conversation, you seemed to assume, or I thought that you assumed, that because I was out of the employ of the company, that I would say so and so.

Q. Well now, is that your version of it?

A. As near as I can get at it from the different questions you have asked, they are all the same.

Q. Well, have you not, within the last ten minutes both sworn that I said in substance that because you were out of the employ of the Railroad Company, you would tell all you knew about it, and at another time, that that did not occur? Have you not sworn both ways in the last ten minutes?

A. I don't think so, no.

Q. Well now, have you anything else to justify your present testimony that I assumed that you had a grievance against the Railroad Company, and would testify against them?

A. No, I have not.

Q. Did you tell me that you had any grievance against the Railroad Company?

A. No, sir.

Q. In our interview in 1907?

A. No, sir.

Q. Did you tell me that you had had any trouble with them?

A. I did not, because I never had had any trouble with them.

Whereupon witness further testified that he became State Forester on March 25, 1911, and has served in that capacity ever since and has had a number of men in his employ engaged in the general work under his charge, including local fire wardens. He has had in his employ what he calls supervising wardens in all the heavily timbered counties. The local fire wardens are under their supervision. The supervisors, as they call them, are hired generally by the timber owners. There is about one supervising warden to each of the counties containing large timber. Last year, (1911) they had, he thinks, twenty-three. This year probably twenty-six. Some counties last year where they had one man

in two counties they had one for each of the counties this year, and he had three men employed in that manner who were formerly employed by the Oregon and California Railroad Company. That is all that he could recall. Roy Woods, W. J. Lander and Porter S. King, are all that he remembers now, that have been in the employ of the Railroad Company. He has no list with him of these supervisors working for him during the time he has been State Forester. There is a list of the supervisors for 1911 in "Defendants' Exhibit 360" being the first annual report of the State Forester. The form used while Andrews was in charge was changed soon after Eberlein came into office to a form similar to "Defendants' Exhibit 261" and "Defendants' Exhibit 358." He cruised a portion of the land near Marcola in Lane County, adjacent to the mill of the Southern Pacific Company, mill No. 1 he thinks it is called, and at various times cruised a portion of the railroad lands in Eastern Clackamas County,—he thinks some lands in almost every township in which the railroad lands are situated in Clackamas County, but could not say that he has cruised all of them. He thinks he has cruised some lands in all of these townships except one or two, possibly. He has cruised nearly all the railroad lands in Polk County and has seen and observed the character of them and has cruised quite a good deal of the lands in Jackson County and has cruised all along the California line and has cruised some in the Butte Falls country and some in Evans Creek and on the main Rogue River and has cruised in the Jenny Creek country in townships

39, 40 and 41, ranges 4, 5 and 6 east. His opinion as to the character of these unsold lands involved in this suit applies, generally speaking, to the even numbered sections intervening those lands. There may have been a quarter section taken up here and there that would support a family, and there might have been a quarter section sold years ago, but the land that is now vacant, that is now in the hands of the Railroad Company and the lands that are not held by settlers, or not being cultivated or lived upon, he would say as far as he knows, there is none that will support a family. The length of time it would take to grow timber large enough for milling purposes on logged off land, depends on the location. Where the red and yellow fir grow one gets fairly good small saw timber in fifty to seventy-five years, good piling and some saw logs out of it. Pine timber would take longer. At present prices the present growth of timber would average about $3,000 a quarter; that would be a very conservative estimate of the valuation on it. For timber lands say $20.00 an acre, referring to the value of timber. He thinks the only practical use that can ever be made of that land is with proper methods of reforestation, to reforest it and get a new crop of timber about every seventy-five years. In seventy-five years from now it would probably be worth as much as the present crop is at this time, anticipating an increased price for the timber. At present prices it would not be worth so much. In his judgment there is approximately 4,600,000 acres of land within the exterior boundary limits of this grant that will never have any practical use except-

ing that of reforesting and getting a new crop of timber about every seventy-five years. This includes the land in the immediate vicinity of the Southern Pacific Company's mill at Marcola, that is the main portion of it. There may be little strips of land along near the Mohawk Creek that would be of more value for agricultural or grazing purposes, but the main portion of the land is of more value for raising timber. The country there is quite rough and generally is too rough for agricultural purposes.

Whereupon the witness further testified as follows:

Q. How about that country in around Butte Falls? Do you find any quarter sections there that would support a family among the railroad lands?

A. I do not think there are any of them there supporting a family—any quarter section in that country.

Q. Well, the Railroad Company will not let them.

A. No, but I mean the Government lands. You asked me about the Government lands.

Q. No, I asked you about the railroad lands.

A. Well, I don't think there are. And I say that I don't think there are of the Government lands where a man is living there on a Government piece of land or any piece of land, he has a little bit of agricultural or hay land and he uses several hundred or possibly several thousand acres of land to range his few stock on to make his living.

Q. Well now, if there are a large number of fami-

lies living on the even numbered sections in the township in which Butte Falls is situated, and have been living there for years, making a very comfortable living, and none of them with more than 160 acres, is there any reason why you should not have seen it when you went through there?

A. No, there is not.

Q. And if there are a number of families maintaining themselves on not to exceed 160 acres of land in the immediate vicinity of the mills of the Southern Pacific Company at Marcola, is there any reason why you should not have seen it?

A. No, sir. There are families in there along the Mohawk River, that are living on probably 160 acres or maybe less. But that is land that has been taken up for years, and it is not such land as is now vacant.

Q. It is entirely different from the lands of the Railroad Company, is it?

A. It is entirely different, in that it lays along the stream and is either little bottom lands or very low bench lands, and not rough and broken, like the vacant lands are.

Whereupon witness further testified that he knows a man by the name of Balderee who is logging foreman for the Gerlinger Logging & Lumber Company in the Black Rock country in Polk County. He thinks that during the time witness was cruising near Marcola for the Southern Pacific Company, that Balderee was

with the Booth-Kelly Lumber Company. Witness would not swear that he never saw a family cultivating and supporting themselves on logged off lands immediately adjoining these railroad lands, of the same character except that the timber had been removed and the land cleared and subjected to cultivation, but he cannot recall a quarter section of land that has been sold by the Railroad Company, on which a family is being supported. He became acquainted in a general way, while working as a cruiser, with the identity of the lands that had been sold by the Railroad Company, as well as the lands which still remain unsold. For a number of years he cruised practically all that the Company sold.

Whereupon on redirect examination witness further testified that he was in attendance upon this hearing under subpoena issued in this cause and served upon him.

Whereupon defendants offered in evidence pages 19, 20, 21, 22, 23 and 24 of "Defendants' Exhibit 360" as to the list of State Fire Wardens for 1911, showing patrolmen paid from Federal funds under section 2 of the Weeks law and State Fire Wardens serving without compensation, or in employ of timber owners or the U. S. Forest Service.

Whereupon witness further testified that these people whose names are on these pages were employed during 1911 as there stated.

Whereupon HOMER D. ANGELL, being called as a witness on behalf of defendants, and being duly sworn, testified that he is thirty-seven years of age, an

attorney, and resides at Portland, Oregon. He and his partner were employed by the land department of the Oregon and California Railroad Company for some time under Eberlein, and had charge of several men who made examinations of various parts of the grant and made reports on the character of the land and took photographs of certain portions of it. That has been four or five years ago now. He is a practical surveyor; began surveying during the summer when he was a small lad, and was employed continuously in that line of work from 1891 until 1903, and has had some, but not extensive, employment along that line since. A good portion of that time he was employed as chainman or other work on surveys, and for a number of years he did contracting work. He considers himself a competent surveyor in matters of that kind, but he never did any surveying for the railroad company other than assisting in locating these lands, of which pictures were taken. He assisted in taking some of the photographs marked collectively "Defendants' Exhibit 270." He assisted in taking the photograph, locating the land from the Government corner, and made the notations, referring to John L. Snyder's cabin on the southeast quarter of Section 17, Township 4 north, range 3 west; and also the notation marked "2" thereon; also Nos. 3, 4, 6, 7, 8, 9, and 10. These seem to be all the pictures that he can identify other than there were two large pictures taken, when he was present.

Referring to Defendants' Exhibit 267, with a notation attached to it, and affidavit made by himself and F. A. Elliott, he made that affidavit so signed by him, and

assisted in taking the picture, and he is one of the men shown standing on the right hand corner of the picture, which was taken by Gifford. The picture was taken from a point in the south half of section 8, township 7 south, range 6 west, and covers an estimated distance of perhaps eight miles in the view shown in the picture. The camera stood, he thinks, on section 8, an even section, but the lands that they were endeavoring to show in the picture were further out, and the picture is a correct representation of what it purports to show.

Referring to the photographs identified by him as part of Defendants' Exhibit 270, they determined who erected these cabins first, by the notices posted upon the cabins, presumably by the claimants, and by the names of the claimants on the notices, and in some instances they saw the claimants themselves, who were present. There was no one living in any of these cabins shown in the pictures which he has identified. In some few of them there were some small utensils for cooking, and in one, a roll of bedding, he believes. The cabins did not have any appearance of having been the domicile of a family or of anybody other than one or two showed that some one had camped there for a night or such a matter. There was an excellent stand of timber in each case where these cabins were situated; chiefly fir.

Whereupon complainant objected to this testimony as incompetent, irrelevant and immaterial, and it was agreed that this same objection shall be considered as taken to all the testimony of the witness relating to the character of the lands within the limits of this grant and

settlements thereon and public land entries thereof.

Whereupon witness further testified that he thinks he is familiar with the stand of timber in Western Oregon, which would be deemed commercially valuable. He gained his knowledge chiefly from his work in the Government service, in surveying timber lands. His work has been quite largely in timbered areas, and it was necessary to his report, to characterize the topography of the land, including the timber upon it, and the chief value that he ascribed to the land, and his experience in making these surveys and reports was in Oregon, and especially timber lands in Oregon, Washington and Idaho, and some portions of Montana. In each instance, the claims upon which these cabins were constructed, and upon which these parties whose names he had given, had made claims, that he examined, were taken upon lands that had a very heavy stand of timber, and there was no instance where a claim was made on lands that would not be classed as timber lands. What is considered a stand of timber per thousand feet board measure in Western Oregon that would make it commercially valuable for timber, depends somewhat upon its location, but his general experience is, that if there is a million feet to a quarter section, unless it is so isolated that it would be impracticable to market it, that it is valuable for timber. He has been over a considerable portion of the lands involved in this suit. He has been in Klamath County, but could not definitely say whether he has been on the portions of the grant in that county, but he has been pretty well around in the timbered area of that

county. He has been along the road from Ashland to Klamath Falls, and on most of the prominent roads, leading out from Ashland. He did some surveying in Klamath County several years ago, near Ashland, but does not recall the township. The timber through which he went where he made these surveys, was of good quality and a good stand of timber. A portion there, is exceptionally valuable for Oregon timber. It is what is called, he believes, sugar pine, and various qualities of pine, not very common in this state. But the major portion of timber is fir. He has been through Jackson County from several different directions, and especially in the timber. He surveyed, he thinks, at least one township in Jackson County, but on Williams Creek. He went from Jacksonville, and it is not a great way out there, west. He has been over lands of the company in the Williams Creek country in Jackson County. The stand of timber in there is not so good as the general stand in some sections of Southern Oregon. The timber is more scattering, but the land in that township is valuable only for timber, in his estimation. Outside of the timber lands, and outside of the valleys of the Rogue River and streams that lead into it, in Jackson County, in his opinion, the lands are of little value. These lands are rocky, covered with very thick brush, and scattering timber in places. There are open places, but outside of small tracts along streams, they do not seem suitable for agriculture, and there is a very poor stand of grass for grazing purposes on the major portion of it. The brush that grows over a good portion of this land that he has thus de-

scribed, is buck brush, commonly called, and manzanita, and these have no commercial value whatever of which he has ever learned. He has been over quite a portion of Josephine County out from Grants Pass. In a general way, these lands are similar to the lands in Jackson County, although the timber is better, he thinks, than in Jackson County, and perhaps more mountainous. The soil of the lands in Josephine County, on these uplands, is of poor quality, not adapted to agriculture. A good portion of the soil is a sort of red soil. There is a great deal of decomposed granite soil. In fact he has had occasion to ship some of that granite from Grants Pass for use at Portland in making walks, and it is used as ballast on railroads to some extent. He does not know of any use that it can be put to for agricultural or horticultural purposes. He has never been in Curry County. He has been over Douglas County quite generally. He did considerable surveying for the Government in that county, ran about thirty miles in length of the Willamette Meridian, he thinks, in Douglas County, and the lands of the company with which he is familiar in that county, are very mountainous and covered with heavy timber or undergrowth, with the exception of isolated tracts on creek bottoms or streams, and are not suitable for agricultural purposes. They are chiefly valuable for their timber, and there are portions suitable for grazing, but not to any great extent, back in the mountains. The chief stand of timber, a very valuable stand in that country, is fir. He has been over portions of Lane County in the timbered area; in fact, up on the McKenzie River,

and north and south. He has made some examinations of timber lands in Lane County in a general way, looking to see the quality of the timber, and if there were timber lands vacant, but has not made any examination, or been over any of the lands west of Eugene, in the Siuslaw country belonging to the company, or other timber owners. The lands which he examined in Lane County, or has seen, were principally tributary to the McKenzie River. They were very high mountainous lands, covered with timber or old burns grown up with undergrowth, and the chief value of these lands covered with timber, were for their timber. It was practically its only value under known conditions. He knows of no use to which these burned over lands in their present condition could be put, but he presumes that if they could be denuded of the brush so that grasses might grow, they would be suitable for grazing, but the cost of putting them in such shape that they would be suitable for that purpose, would be prohibitive. He has been in the Eastern portion of Linn County in the timbered area, in the Santiam country, up from Lebanon. He did some surveying on the Santiam, in township 10 south, range 4 east, but is not sure that this is in Linn County. He has been over a considerable portion of the company's lands in the eastern part of Linn County, and especially in connection with Government surveying. The chief characteristic giving these lands value is their timber; practically their only characteristic, other than isolated portions. These portions that might be utilized for some agricultural purposes, are small tracts, and his experi-

ence has been that there is no tract other than just a few acres, that is suitable for agriculture, at least without an enormous expense. These tracts are isolated and separate from one another, and lie chiefly along streams. There are certain level patches on divides that might be adapted to agriculture, but no body of land of any considerable size. He has not been in Lincoln County to any extent. He has been over portions of the timbered area of Marion County, and the lands, according to his information remaining unsold in the grant in that county, are mountainous and rough, and portions of them are covered with a good stand of timber, and their chief value is for the timber. There is a considerable area of burned over lands in Marion County among these lands. They are covered with stumps and standing dead trees, and heavily covered with undergrowth. Such lands have practically no value under modern conditions, of which he knows. He has been out through portions of Polk County, and has been on and examined some of the lands of the Company. The lands that he had to do with in Polk County were timbered lands, and portions of them were in old burns, and those that were covered with timber were chiefly valuable for their timber. The burned over land is of very little use without a great deal of expense in attempting to clear it. He has been over portions, but not over the whole of Clackamas County. He has been in places over the timbered lands on the Clackamas River. These lands are timbered, with the exception of portions that are scattering burns. The chief value of the lands belonging to the company that

he has examined in Clackamas County, was their timber. He has crossed over the mountains going from North Yamhill to the Coast in Yamhill County, over the headwaters of the Trask, and in going that way he presumes he would see or go over unsold lands of the company. The company's lands are scattered through there in the odd sections, and he thinks it would be impossible to go across, without crossing the company's lands. These lands and the adjacent even sections are mountainous, and considerable portions of them are covered extensively with timber, a good stand of commercial timber, and in places there are burns. He has to some extent been over the company's lands in Multnomah County, up towards Latourelle Falls, back from the Columbia River. These lands are very mountainous, exceptionally so, and covered with a heavy growth of timber. Portions of those lands perhaps have the heaviest growth of timber in the grant. He has been in the vicinity above Latourelle Falls, and towards Larch Mountain, and these lands have an exceptionally good growth of timber. It is his impression that he has not been over any of the lands in Washington County. He has been over roads leading into Tillamook County, which passed through the mountains, and in doing so, had to go over the timber lands. And from his knowledge of these lands in Tillamook County, he would say their chief value was for the timber. There is an excellent stand of timber on the mountainous lands in Tillamook County. He has been in Columbia County, out in the vicinity of these claims, the pictures of which were identified by him, and he ex-

amined somewhat the character of the lands surrounding these claims. The general character of the unsold lands of the Company in Columbia County is very heavily timbered and covered with a very heavy undergrowth. Their commercial value is for the timber only. According to his understanding of the value of timber, these claims of 160 acres each, are worth from $5,000 to $20,000. The market value of stumpage on such timber in Western Oregon runs from 75 cents to two or even three dollars, owing to location with reference to ability to get it out. He has not dealt in, bought or sold timber lands, but knows of them being bought and sold. He has quite a general knowledge as to the value of timber, for the reason that he had considerable to do with it at the time he was connected with the Oregon and California Railroad Company. The lands that were sold, the stand of timber was taken, and he placed valuations upon it, and then he had to do with the value of timber other than that. He surveyed in the Forest Reserves, but not for the purpose of locating the reserve itself. He has surveyed for the Government, lands that were in the reserve. He has been through Coos County, and thinks he surveyed a small fractional township in that county, in the timbered area, which had an excellent growth of timber. The character of the lands which he surveyed in Coos County is very rough and heavily covered with undergrowth. Its chief value is for its timber. He was reared on a farm in Eastern Oregon, and lived in a farm until he was about fifteen years old, and since that time has some knowledge of farm life from obser-

vation in this country, particularly in Western Oregon.

Q. Now, suppose the company had sold these lands to so-called actual settlers, in quantities not exceeding 160 acres, and at a price not exceeding $2.50 an acre, and the actual settler had obtained a good title to the quarter section thus sold to him, and it was covered with this stand of timber or with the timber that is on these unsold lands, how long do you think it would be after the so-called actual settler got his title at $2.50 an acre, that he could sell that land to timber investors?

Q. And what would be the best use that he could make of that land?

A. Practically the only use he could make of the land would be to sell it for its timber, or sell the timber. My experience has been, in surveying in the timbered areas of this state, as well as other states, that lands acquired by homestead from the Government on the timbered areas are never occupied for any appreciable period after title has been acquired. I suppose that in all the lands that I have surveyed, and that I have been connected with since 1892, there were not half a dozen that were acquired either by homestead or by purchase, that the parties lived on after they secured their title.

Q. What did they do with the land?

A. They moved off, the buildings went into decay, and the small portions that were cleared were soon overgrown with undergrowth, and if there was timber on the land, the lands were sold to holders of large timbered tracts.

Q. Would that be the experience of these lands if the title was passed to these so-called settlers, in quantities of 160 acres at $2.50 an acre?

A. It would.

Q. Now, suppose that a settler was expected, under the Act, to go out there and live on one of these quarter sections, like some of these photographs which you have taken here, and to make a living for himself and his family on that quarter section, and to confine his stock that he might own and might pasture to the quarter section, what, in your judgment, would be his ability to make a living for himself or his family on that quarter section.

A. In my opinion it would be impossible to make a living off the land itself. If the land was contiguous to roads, he might cut wood and haul that to market and make a living, or he might by trapping or hunting; but by making a living from agriculture on the land, it is an impossibility.

Q. Could he make a living by grazing on the land?

A. There might be some isolated claims that he could, in some portions of Southern Oregon, but in the mountainous regions of Tillamook County or Yamhill County, Columbia County, or in the Cascades, along the border of the Cascades, where the company's lands are now located, it would be impossible in practically every instance to make a living by grazing.

Q. If he undertook to live on any of these quarter sections by means of pasturage, would he or would he

not have to have an out-range besides?

A. It would be impossible to make a living off any one of these timbered quarter sections by grazing, being confined to that quarter only, in its present condition.

Q. Suppose a man went up into these big burns, picked out a quarter section that was burned over, or that did not at the present time have any considerable amount of timber on it, and undertook to make a home there for himself and his family, put some of this land to grass in the stumps after burning off the debris, do you think, or do you know of any quarter section within the limits of this grant where a man could go and take his family and fence his quarter section and make a living by pasturage on that quarter section?

A. I do not think there is a quarter section in the grant that could be used for that purpose. One of the main reasons why I am inclined to that opinion is that these lands are in high altitudes, and there is considerable snow falls there, and it lies on for a long period, and it would be necessary to raise hay in order to winter stock, or else take them to some other place during a large portion of the year. And a great deal of this land, when we begin surveying in June, the snow is very deep, especially on the north hillsides and all the mountains, and does not go off until midsummer, and then snow begins to fall in September in a great many places. As soon as we have the fall rains in the valley, it is snowing on the mountains.

Q. Some of these lands under the testimony here

have been classified as grazing, and there has been some testimony that these lands when logged off could be seeded, after the fire had run through and burned over the land, and that the land could be pastured in that way over considerable areas. Do you not think, or do you think, that would be practicable, that it could be done?

A. Not practicable under present conditions. From my own personal knowledge, I know of thousands of acres that have been logged off that are admirably situated for that thing, if it could be done, but they are not utilized for that purpose, and I presume the chief difficulty is that as soon as the timber is removed, there is a very dense growth of undergrowth springs right up, and that may all be taken off one year, and next year it is all on there. It is almost impossible, seemingly, without taking the stumps and plowing the land thoroughly from year to year for a number of years, to eradicate the undergrowth.

Whereupon witness further testified that re-forestation of these lands has not been called to his attention and he has no knowledge of that. He discontinued his employment about the time Mr. McAllaster became connected with the company, he thinks about four years ago, and since that time he has had no employment with the company, or with the Southern Pacific Company, and thinks he never made any cruising or formal reports to the company of cruising, with the exception, possibly, of one or two instances, practically none.

Whereupon, on cross examination, witness further

testified that he was born in Eastern Oregon, about eight miles from The Dalles, and remained on the farm until he was fifteen years of age, but was going to school a portion of that time. He was admitted to the bar in 1902, and has been engaged in the practice of law since 1903. Since he was twenty-one years of age he has been in the Government service other than when he was a student during the winter time, until he was admitted to the bar, the Government service referred to being Government surveying. He was a student in school during the winter and engaged in surveying during the surveying season, working for W. E. Campbell, United States Deputy Surveyor, and for Ed Sharp, who was a deputy, and after that witness was a contractor. He had been employed by contractors, men who had Government contracts, up until about 1900, and then for about ten years he was contracting for himself. He has owned farm lands since he reached man's estate, but he has not been actually engaged himself in farming, and would say that he understands farming as it is practiced in this country, but has not been engaged personally in the work of farming, and he has not been a farmer, except as an investor in some lands that he owned that are farm lands and that are being farmed; his experience until he was fifteen years old, on a farm, and since then, his people being farmers, he has had more or less to do with farmers. He is not a timber cruiser, although he testified as to having made some cruises of timber within this grant. He had made estimates of timber standing on claims, and he supposes it might be said that he made these as

a timber cruiser, although he is not a cruiser and does not pretend to be. He thinks he can determine in a fairly accurate way the stand of timber on a claim. His experience in the woods has been such, he thinks, that he can do that, but he has never followed timber cruising. The memorandum noted on these photographs referred to by him, were made as soon as he returned after taking the picture, perhaps the next day. He made the notes in the field and then had them written on the typewriter. He made notes and wrote them as soon as he could get to a typewriter. These are not memoranda that he made on the ground, he does not think they are even copies. He made notes and then made this up from his notes as soon as he could get to a machine, and they are not verbatim memoranda that he made on the ground. The affidavit attached to Defendant's Exhibit 267 was not made on the ground, but immediately after returning from the field, possibly the next day, when the matters were fresh in his mind. Two or three days was usually the extent of any one trip. He supposes he would say that he was in charge of the parties that were cruising this land, making the examinations and taking the photographs, if one would say that any one was in charge. They went out, two or three of them, to take the photographs, and received all of their directions from Eberlein. The photographs were taken in 1907, on the dates indicated in the memoranda. He thinks that it was after the people had filed their applications, as they were first filed in San Francisco. He was informed by the company, and it was his understanding, that these

people had filed applications. It is his impression that he surveyed a township for the Government on Indian Creek, in Klamath County, but he is not certain whether it was Klamath County or not, but he does not recall the details, because it is a good many years ago, and he has had no occasion to refer to it. He thinks that it was in, perhaps 1902. He did not, in 1902, survey that entire township, it was prior to that time. He was not in charge of the party. He was doing Government work at the time, but went with his nephew, who had some work there, and witness had some work in another place and they joined their cruise together, and went in on that work. He thinks that is the only township he surveyed in Klamath County, and he is not sure that it was in Klamath County, but he has been over Klamath County pretty much. He went from Klamath Falls to the lake, and then from the lake down to Medford, on a trip to see the country. He then went back on this work when they went up Indian Creek, and he passed through Klamath County, from Ashland to Klamath, and has been on the railroad running from Weed, California, up close to Klamath Falls. He is not sure whether that touches the lands involved in this grant or not. These trips that he made were traveling along the public highways and not surveying trips, except the one surveying trip that he had there. He made one or two other trips in that country. He thinks it is Klamath County, looking at some lands in connection with work for the company. Rees and he went down there. He does not recall the township; they went out from Ashland, back

into the mountains. He surveyed a township in Jackson County, and he thinks it is 39 south, 6 west, but is not sure—it is on Williams Creek, and that is the only township he surveyed there, he thinks, and the only surveying he thinks he did in that county. He thinks he did not do any cruising there. In Douglas, he did quite a little surveying, where he ran the Willamette Meridian, if that is in that county. It is either in or right on the boundary line, but may be on the boundary. He thinks he was on Township 32 south, to 27 south, going north. Referring to Defendants' Exhibit 259, it is his impression that they ran the meridian line from the southern boundary of township 30 south, to the northern boundary of township 27 south. He does not recall that he has done any surveying in that county excepting these two townships, and running the meridian, and he thinks perhaps not. He went through that country, through the timbered area there, looking for vacant lands after that, but did not make an accurate cruise of the timber, but sized up the timber going through. He did not go through the entire timbered area in Douglas County, but went over quite a bit of the timber near that he mentioned that he surveyed, and west of that. Since he became twenty-one years of age he has been in the mountains in the summer time, and in the winter in school, with no particular place of abode, excepting that his people live at The Dalles, where he supposes his headquarters would be, where his mother lived. He attended the University of Oregon four years after leaving The Dalles, and then three years in Columbia University in

New York, and has lived in Portland since 1903. He does not recall whether he did any surveying in Josephine County.

Q. In Lane or Linn County, have you surveyed any there?

A. I have done no Government work there.

Whereupon witness further testified that he had not cruised any lands in Linn or Lane County, but had been through the lands, looking at them to determine their character and the amount of timber, but not to make an accurate cruise. Some of that work was done for the company, and locating certain lands to see what they were valuable for, and as to other lands, he was looking for Government land that might have timber suitable for taking under the Timber and Stone Act. He has never filed a Timber and Stone claim or homestead entry, and never dealt in timber lands.

Q. Why didn't you file on some of the timber-land there was an opportunity to get?

A. If you had told me that ten or fifteen years ago, I would probably be worth $10,000 or $15,000 more. One reason I did not, when I was in the Government service I was prohibited from taking any lands under Government Act. That prohibited me from taking lands when I was directly connected with the Government, but not after I discontinued.

Q. You were not connected with the Government or working for the Government?

A. Oh, yes, I was. I was a contractor, and under bonds, and had to file my oath of office.

Q. That was while you were engaged as a contractor?

A. Yes.

Q. On the survey of these lands?

A. Yes. That continued up until about 1904, because there were certain contracts had not been closed up until some time after I was practicing law; they hadn't been finally disposed of, and I was still connected with the Government.

Q. Well, that merely contractual relation would not prevent you from filing on timber-lands, would it?

A. I think so.

Whereupon witness further testified that he would like to correct his testimony if he stated that he had made numerous trips over a number of counties looking for a timber claim. He did not state he was looking for a timber claim. He said he was looking for timber land, or lands that might be desirable to be taken under the Timber and Stone Act, but not for himself. He was looking for these lands for various persons. He had told two or three people where they might find timber claims, and he thinks they paid him for this information. That is the only selecting that he ever did. He never did any surveying or timber cruising in Polk County. He has examined the character of the lands with reference to timber for the company, but has not made accurate

cruises. He thinks he has never cruised or surveyed any lands in Benton, Washington, or Columbia counties, but he has examined lands for the company and made some other examinations for their general character. There was a great rush for timber lands here and the people who lived in Oregon, most of them, woke up about the time the timber was all gone, to the fact that they were valuable. After the lands practically were all taken, he did some reconnoitering around through various counties to see if there was any timber that might still be had. This was along from 1900 on. The timber excitement in Oregon started before 1900. He knows a great many people came here from Michigan and Minnesota as early as 1892, and took lands in the Santiam country. Large portions of these timber lands were acquired from the Government in 1900 and subsequently. He noticed the excitement with reference to filings in his Government work as early as 1892. Perhaps it was not so generally known then—it was more quiet. People who had come from timbered states, such as Minnesota and Michigan, were quietly taking up claims, and his connection with it was to the extent: these people who would locate on a township and where there would be three in a township, they would make application, and ordinarily the Department would order the township surveyed, so that in all these townships that they surveyed they would find three or four settlers, maybe half a dozen, who were acquiring timber claims under homesteads. There were no other persons in the township. It gradually increased until along in 1900. It was, he supposes, at its height

along in there some place. Large bodies of these lands were acquired in 1900 and subsequently through Santa Fe and other scrips that were required to be filed on surveyed lands, although he has no particular knowledge as to that. He did not have much to do with lands upon which scrip was placed. Scrip was either placed after the lands had been surveyed, or if it was scrip for unsurveyed lands, they knew nothing about it. They would put the scrip on and would not ask to have it surveyed. That was principally Northern Pacific scrip. There was some "additional" scrip. These photographs were all taken in the examinations of this land made while he was employed by the O. & C. Railroad Company and under the directions of the officers of that company. They were practicing attorneys when they were employed by the company. Their work when they began for the company was chiefly with reference to the investigation of titles. There were a great many of the grant lands that had been sold for taxes, and some of them had adverse possession running against them, and there were gaps in the rights of way, and matters of that sort, and their operating lands were involved. There never had been a thorough investigation of the titles, to see what condition they were in, and when Eberlein took charge of the office he started an investigation of that sort, and Mr. Bristol had charge of that for some considerable time. After Bristol quit the service they took up the work, and that was chiefly the work that they were doing, although they did do some work along the line that he has been testifying, in the way of examining

lands and making reports on lands upon which applications had been made under the Act of 1869; but the major portion of their work was in reference to titles. When that work was completed their services were discontinued.

Q. After the agitation of this suit began, then you were put on this work of examining into settlements?

A. Well, we made some examinations while we were closing up the other work. When the other work was closed up, why—

Q. That was in 1907?

A. Yes.

Whereupon on re-direct examination witness further testified that as he is informed, Henry S. Graves is Chief of the Forest Service, succeeding Mr. Pinchot, and he has seen the article "Defendants' Exhibit 345" purporting to have been written by Mr. Graves. Whereupon defendants offered in evidence this article entitled, "Farms in the National Forests," reproduced under the head of "Extension of Remarks of Hon. William Kent, of California, in the House of Representatives, Thursday, August 15, 1912," beginning at page 12098 and including page 12102 of the Congressional Record, and being the article in the Saturday Evening Post of August 17, 1912,—to which complainant objected as incompetent, irrelevant and immaterial and not properly identified,—which was received in evidence and is hereinafter set out and described and made a part of this statement of the evidence and identified as Defendants Exhibit 345.

Whereupon witness identified the document "Issued June 17, 1911. U. S. Department of Agriculture, Forest Service—Bulletin 88, Henry S. Graves, Forester. Properties and Uses of Douglas Fir." Washington, Government Printing Office. 1911," which was marked Defendants Exhibit 346.

Whereupon defendants offered in evidence this document, to which complainant objected as incompetent, irrelevant and immaterial, and Defendants' Exhibit 346 was received in evidence, and the part thereof particularly offered is in words and figures as follows:

"Issued June 17, 1911.
U. S. DEPARTMENT OF AGRICULTURE,
FOREST SERVICE—BULLETIN 88.
HENRY S. GRAVES, FORESTER.

PROPERTIES AND USES OF DOUGLAS FIR

PART I. MECHANICAL PROPERTIES
PART II. COMMERCIAL USES.

BY

McGARVEY CLINE, Director, Forest Products Laboratory,

AND

J. B. KNAPP, Assistant District Forester.

(Seal) UNITED STATES DEPARTMENT OF AGRICULTURE
1862 1889
AGRICULTURE AND COMMERCE
THE FOUNDATION OF MANUFACTURE

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1911."

[2789]

"LETTER OF TRANSMITTAL.

UNITED STATES DEPARTMENT OF AGRICULTURE,

FOREST SERVICE,

Washington, D. C., January 16, 1911.

Sir: I have the honor to transmit a manuscript entitled 'Properties and Uses of Douglas Fir,' by McGarvey Cline, Director of the Forest Products Laboratory, and J. B. Knapp, Assistant District Forester, and to recommend its publication as Bulletin 88 of the Forest Service. The 3 plates and 15 diagrams which accompany the manuscript are necessary for its proper illustration.

Respectfully,

HENRY S. GRAVES, Forester.

HON. JAMES WILSON,
Secretary of Agriculture."

(Pages 9 and 10.)

"PROPERTIES AND USES OF DOUGLAS FIR.

INTRODUCTION.

It is the purpose of this bulletin to present the facts about the mechanical properties and uses of Douglas fir which have been collected by the Forest Service. Part I, which deals with the mechanical properties of Douglas Fir, is based on an exhaustive series of tests made in the laboratories of the Forest Service. The results of these tests are of special interest to the users of structural timber. Part II, which deals with the commercial uses of the timber, is based on information furnished by lumber manufacturers and other industrial concerns that use Douglas fir. The gathered facts are of interest in that they show the wide utilization of this tree.

Since 1903 the Forest Service has been making a comprehensive series of tests to determine the mechanical properties of the commercial woods of the United States. The work has been done at laboratories conducted in cooperation with the Yale Forest School, New Haven, Conn.; Purdue University, Lafayette, Ind.; the University of Colorado, Boulder, Colo.; University of California, Berkeley, Cal.; the University of Washington, Seattle, Wash.; and the University of Oregon, Eugene, Oreg. General summaries of the results secured have been published in Forest Service Circulars 32 and 115, 'Progress Reports on the Strength of Structural Tim-

ber,' and from time to time other circulars dealing with particular series of tests have been issued.

The tests on Douglas fir were made at the Oregon and California laboratories; the material was cut in Lane County, Oreg., and was contributed by the Pacific Coast Lumber Manufacturers' Association and by the Oregon and Washington Lumber Manufacturers' Association. For the information contained in Part II the Service is indebted to many manufacturers and users of Douglas fir, and especially to the officers of the Oregon, Washington, and Pacific coast lumber manufacturers' associations, for their cordial cooperation.

Douglas fir may, perhaps, be considered as the most important of American woods. Though in point of production it ranks second to southern yellow pine, its rapid growth in the Pacific coast forests, its comparatively wide distribution, and the great variety of uses to which its wood can be put place it first. Estimate of the available supply range from 300,000,000,000 to 350,000,000,000 feet board measure. It is very extensively used in the building trades; by the railroads in the form of ties, piling, car, and bridge material; and by many of the manufacturing industries of the country. As a structural timber it is not surpassed, and probably it is most widely used and known in this capacity.

The species is most abundant and attains its largest size not far above the sea level in southern British Columbia and in the region between the coast of Washington and Oregon and the western foothills of the Cas-

cade Mountains. (See Diagram 1, map.) Here large trees crowded close together rise to a height of from 200 to 300 feet, forming, either alone or mixed with hemlock, very dense forests that yield from 35,000 to 60,000 board feet per acre and sometimes as much as 100,000, and are in one recorded instance 500,000 feet.[1]

The wood is strong and hard, not very heavy, and fairly durable. These qualities particularly recommend it for structural purposes. The grain is straight. The spring and summer wood vary greatly in density; the spring growth is soft and spongy and almost white in color, while the summerwood is hard and flinty and very dark. The grain varies from as few as four or five rings to the radial inch to as many as forty-five.

In the eastern part of its range in the Rocky Mountain region, where the rainfall is not abundant and where extremes of climate occur, the trees are much smaller, rarely over 1½ feet in diameter and over 90 feet high. In this section the stand ranges from 2,000 to 8,000 board feet per acre.[2]

Douglas fir is known by various names in different sections of the country. The most common names and the States in which they are used are:

Douglas fir (Utah, Oregon, Colorado, Washington.)

Red fir (Oregon, Washington, Idaho, Utah, Montana, Colorado).

Douglas spruce (California, Colorado, Montana).

Yellow fir (Oregon, Montana, Idaho, Washington).

Spruce (Montana).

Oregon pine (California, Washington, Oregon).

Fir (Montana).

Red pine (Utah, Idaho, Colorado).

Puget Sound pine (Washington).

Douglas tree.

Cork-barked Douglas spruce.

The name Douglas fir has been adopted by the Forest Service and by various trade and technical associations, and is coming into general commercial use.

[1]Transactions of the Royal English Arboricultural Society, Vol. VI, p. 228.

[2]For a comparison of the Rocky Mountain and Pacific Coast forms of Douglas fir see Forest Service Circular 150 Douglas Fir, by E. H. Frothingham.

Whereupon witness recognized "Circular 150," "U. S. Department of Agriculture, Forest Service—Gifford Pinchot, Forester," marked Defendants' Exhibit 347," and recognized the same as an official bulletin issued by the U. S. Department of Agriculture.

Whereupon defendants offered said document in evidence, and particularly page 13, which shows the timbered area "(1) North Coast Region," Douglas fir covering the western part of the state of Oregon and Washington, to which complainant objected as incompetent, irrelevant and immaterial, which Defendants' Exhibit 347 was received in evidence and is hereinafter set out

and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness recognized as an official document issued by the Department of Commerce and Labor, Defendants' Exhibit 348, being "Forest Products, No. 2 Lumber, Lath and Shingles 1910 Compiled in cooperation with the Department of Agriculture: Forest Service, Henry S. Graves, Forester, issued February 20, 1912."

Whereupon defendants offered said document in evidence as Defendants' Exhibit 348, and read into the record that part of the table, page 4, "Table 2.—Lumber, lath, and shingles" as follows:

Number of active mills reporting and quantity of lumber cut, with per cent of increase and per cent distribution, by states: "1910, 1909, and 1908," under the column:

State	Rank in Production			Number of Active Mills Reporting		
	1910	1909	1908	1910	1909	1908
Washington	1	1	1	951	1,143	929
Oregon	4	9	8	574	696	595

Page 5, "Table 2.—Lumber, lath, and shingles—Number of active mills reporting, etc.

State	Lumber Sawed							
	Quantity (M feet b. m.)			Per cent of increase		Per cent distribution		
	1910	1909	1908	1909 to 1910	1908 to 1909	1910	1909	1908
Washington	4,097,492	3,862,916	2,915,928	6.1	32.5	10.2	8.7	8.8
Oregon	2,084,633	1,898,995	1,468,158	9.8	29.3	5.2	4.3	4.4

Also page 6 of this document, which reads:

"Mississippi, also a yellow-pine state, retains third place, and Oregon, with a greater cut than ever, has advanced to fourth place, while Wisconsin, the leading state 10 years ago, stands fifth. The rise of Oregon has been exceptionally rapid. This state, which ranked twenty-third in 1899 and reported 734,538,000 feet of lumber, has increased its production since that time 183.8 per cent, the cut in 1910 amounting to 2,084,633,000 feet, by far the larger part of which was Douglas fir."

Also diagram of the "Lumber production, by states, 1910," page 7, giving the "Billions of Board Feet" in a table, showing Oregon fourth, and which reads as follows:

"Probably not less than one-fourth of the lumber shipped from Oregon and about one-fifth of that shipped from Washington goes by water, the larger part of it to California ports. Large quantities of lumber produced

in these states, however, are shipped directly to Australia, China and Japan, South America, Africa, Mexico, and Central America, in the order named, and a considerable amount to Hawaii, Alaska, and the Philippines. The Alaska trade, however, is decreasing owing to the erection of lumber mills in that territory.

"California, producing chiefly redwood and pine, reported in 1910 the highest production since 1907. This state also ships part of its product to non-contiguous possessions of the United States and foreign ports. The three Pacific Coast states, together with Idaho, supply the bulk of the timber required in the western half of the United States."

Also page 9, bottom of page, commenting on Table No. 3, the following:

"The rank in point of production of the five leading woods was the same in 1910 as in 1909, Douglas fir showing the greatest relative gain.

"For more than 10 years yellow pine has been the leading wood in point of quantity produced. In 1910 this wood furnished a higher proportion of the reported cut than in any other year except 1904 and 1909. Douglas fir, with a greater production than ever before reported, ranks second, as it has done since 1906."

Also page 13, under the subject "Douglas Fir."

"The estimated stand of Douglas fir timber in the United States is greater than that of any other softwood and more than the combined stands of all the hardwoods.

Its geographic range extends over 10 states, from Colorado and New Mexico westward to the Pacific Coast. Its best development and heaviest stands are found in western Washington, western Oregon, northern California, and Idaho."

Also Table No. 5, "Lumber, lath, and shingles—Douglas-fir lumber—Number of active mills reporting and quantity cut, by states: 1910."

Douglas Fir Lumber Sawed:

State	Number of active mills reporting	Quantity (M feet b. m.)	Per cent distribution.
United States	1,847	5,203,644	100.0
Washington	516	3,259,546	62.6
Oregon	452	1,714,462	32.9

"Washington produced more lumber in 1910 than any other state, and practicaly four-fifths of the amount was Douglas fir. Nearly two-thirds of the Douglas-fir cut was reported from Washington; about one-third from Oregon, and the remainder, amounting to less than one-twentieth, was divided among eight other states."

Also page 17:

"The 1910 cut of western pine was the largest ever reported, exceeding that of 1907 and showing an increase of 4.1 per cent over 1909. California, Idaho, Oregon and Arizona show a moderate increase in production from 1909 to 1910, while Washington, Montana, Colo-

rado, and New Mexico show a slight decrease," Oregon showing 180 mills actively reporting sawing western-pine lumber, quantity 209,636 feet board measure; per cent of distribution 13.4.

Whereupon witness testified that Defendants' Exhibit 349 is an official document issued by the Forest Service September 5, 1907, to which complainant objected to as incompetent, irrelevant and immaterial. Which said Defendants' Exhibit 349 was offered and received and is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness, upon re-cross examination further testified that he owns a small tract of land in Washington County, one the line next to Clackamas, in section 12, township 1 south, 1 west, close to the meridian, consisting of 28 acres of farming land. He supposes that it was timbered at one time, a good many years ago. A portion of the lands surrounding it, large bodies of it, is timbered at the present time. It has been logged off and is now cleared, and most of it was cleared when he purchased it. He owns the larger part of the stock of a corporation which owns a piece of land in Tillamook County, not far from the town of Tillamook. It is not a farm, it is a sort of waste land or burn. He has never seen it. He took a chance in buying it without seeing it, and does not know very much about it excepting that he had a man go on it and examine it. It is not dairy land. It has some timber on it, not a great deal. He didn't pay

very much for it, and thinks there is 80 acres in it. He is not putting it on the market to sell, but just letting it lie there. There is quite a dairying country around in Tillamook County, but he does not know as it is in that vicinity. There are dairying interests there in that county.

Whereupon, on redirect examination, witness further testified that there are no dairying lands on these timber lands of the company, and that these dairying lands in Tillamook County are down in the valley, around the town of Tillamook. It has been his experience on the land grant lands that all those portions of the grant that were suitable for agriculture or for dairying, or anything of that sort, were acquired by individuals soon after the grant was acquired, and while the grant was being sold, a great many years ago.

Whereupon, on re-cross examination, witness further testified that his last statement is from his observation in the field and from a study of the maps showing the lands that have been sold by the company or under contract. He could not tell by observation in the field when the land had been acquired, but could tell by observation in the field that certain lands that had belonged to the company were now under cultivation and had been acquired a long time ago. These lands were not timber lands.

Whereupon A. W. REES, called as a witness on behalf of defendants, being first duly sworn, testified that he is fifty-one years old, resides at Portland, Oregon, and is an employe of the Oregon and California

Railroad Company, and has lived in Oregon thirty years, with the exception of three years when he was in British Columbia and Washington. He has been in the saw mill business in the capacity of head sawyer and operated a mill from 1882 up to 1904 or 1905, and most of the time since, he has been in the timber business or cruising timber. Up to the present time, except in the last two or three years, he had charge of the Portland office of the Oregon and California Railroad Company. He is manager of the field work in Oregon for the company, and is a practical cruiser of timber lands.

Referring to Defendants' Exhibit 353, showing 16,351 acres being east of Willamette Meridian on one sheet, and 31,907 acres west of Willamette Meridian on another sheet, witness testified that he cruised these lands, he believes, all within the last four or five years, and these lists were made up from cruise reports that he made that are now in the office, and they show the character of the land as shown by the reports, and show the present condition by township, range, section, county, and whether timber, grazing or agricultural, as shown by these reports, and they also show the condition of the land when denuded, as shown by these reports, to which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands involved within the limits of the grant and to settlements thereon and public land entries thereof.

Whereupon witness further testified that these statements showing 7,124 acres in their present condition classified as timber lands, and 6,282 acres classified as grazing land, and 2,945 acres classified as agricultural lands, or 18 per cent of the total of 16,351 acres in their present condition as agricultural, are correct so far as his reports show and from his actual knowledge of the lands in the field, that is his judgment. The statement that when denuded there are 10,866 acres classified as grazing, and 5,485 acres as agricultural, and that the agricultural is 33.54 per cent of the total of 16,351 acres lying east of the Willamette Meridian, is correct according to his judgment, according to these reports. The statement showing 29,492 acres west of the Willamette Meridian, classified by him as timber, 2,295 acres classified as grazing, and 120 acres classified as agricultural in their present condition, or .376 per cent agricultural in their present condition, and when denuded 30,740 acres grazing and 1,167 acres agricultural, or 3.65 per cent of the total 31,907 acres, is correct according to his judgment.

Whereupon defendants offered and there was received in evidence these two tabulated statements marked "Defendants' Exhibit 353," there being no objection that the original reports from which these are tabulated are not produced, which exhibit is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that he had about two of each kind of these reports which he made

as a cruiser, with him, and producing three of such reports testified that he prepared Defendants' Exhibit 354, being three reports, and delivered the reports to the company, from actual cruises in the field made by him while in the service of the company as to these lands, and they are a fair representative sample of all of the reports made by him, upon which Defendants Exhibit 353 is based. These reports were made to the company to be acted and relied upon by it in the course of its business, and expressed his best judgment at the time they were made. F. A. Elliott, S. A. Carmichael, T. J. Cronin, C. A. Cavill, M. F. McGown, John McDonald, Ben Pack and Wm. W. Penoyer, who were cruisers for the company, made reports to the company in the same way, and these reports are in his custody as custodian of the records of the land department at Portland. He cannot explain how it is that Defendants' Exhibit 354 has two different forms, or how these forms happened to be used or adopted, as they were given to him to use by the San Francisco office, and some three or four years ago they changed the form of report, sending him the brown colored form S-5649 to be used in the future in place of the other form. Defendants' Exhibit 261, showing the cruise reports of McLeod and McLennan are substantially the same as this brown colored form. In preparing Defendants' Exhibit 353, he used the classification that is given on the form with reference to certain sections cruised, and did not have on these forms a classification for land that is barren or rocky, or totally unfit for any purpose, as a separate classification. That

character of land is classified as grazing land. Lands are either timber, grazing or agricultural in their original condition, under these reports, and when denuded they are grazing or agricultural. He included in grazing any lands, if there were any, that might be rocky, barren, or without any soil, or timber, or any value. Everything is grazing that is not shown as timber or agricultural land. His instructions were to classify the land as timber, grazing or agricultural lands. The timber lands are lands chiefly valuable for the timber, the stand of merchantable timber thereon. Agricultural lands are lands of very little timber and which could be plowed and cultivated, in quarter sections or less, used for agricultural or orchard purposes, and that would yield a reasonable return on the investment. All other lands are classified as grazing lands, regardless of whether they have any value for grazing purposes or not. That is to say, if they were neither timbered or agricultural, they would be classified as grazing.

Whereupon defendants offered and there was received in evidence Defendants' Exhibit 354, which is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that Defendants' Exhibit 355, purporting to be a tabulated statement showing the cruising of F. A. Elliott, is a correct statement.

Whereupon defendants offered said Defendants' Exhibit 355 in evidence, to which complainant objected

as incompetent, irrelevant and immaterial, and that the witness is not competent to identify the accuracy of these cruises, but no objection is made that the defendants do not produce the original reports.

Whereupon said Defendants' Exhibit 355 was received in evidence and is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that S. A. Carmichael is a timber cruiser, who worked for the company a number of years, and that Defendants' Exhibit 356 was made from these cruisers' reports made by Carmichael to the company in his custody, and to the best of his knowledge that exhibit shows correctly what the cruise reports show. He caused these tabulated statements to be prepared under his supervision. A few of the reports he prepared himself, he actually participated in the work, and saw that the others were correctly done.

Whereupon defendants offered in evidence Defendants' Exhibit 356, to which complainant made the same objection as last above. Whereupon said exhibit was received in evidence and is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that T. J. Cronin, C. A. Cavell, M. F. McGown, John D. McDonald, Ben Peck and Wm. W. Penoyar, whose names appear on tabulated statement marked "Defendants' Exhibit 357," were timber cruisers who cruised the timber for the

company at various times. Each of them made his report to the office, and these tabulated statements are correct reproductions of the summary of these reports so made, to the best of his knowledge and belief, and these reports are in his possession as custodian of the records of the company at Portland. These cruisers' reports were made in the usual and ordinary course of business, and these men were then in the employ of the company, and he believes they are all competent cruisers, they were supposed to be, and so far as he knows their work was satisfactory.

Whereupon defendants offered in evidence these tabulated statements marked as "Defendants' Exhibit 357," to which complainant objected as incompetent, irrelevant and immaterial, but made no objection that defendants did not produce the original reports, which said exhibit was received in evidence and is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that these cruisers' reports upon which Defendants' Exhibits 355, 356 and 357 are based, were all made upon substantially the same forms as Defendants Exhibit 354, and Defendants' Exhibit 261, possibly there were a few of these examination reports made by land examiners instead of by timber cruisers, which were used, although not many of them. Defendants' Exhibit 358 is the form that was possibly used by some of these cruisers. These forms were for making special reports on certain tracts of land that were to be examined for various purposes,

and were not generally used in the general cruising. This form, Defendants' Exhibit 358, has grades of agricultural lands, first grade, second grade and third grade —and timbered or wooded land, cultivation, care and extent, grazing land, first grade, second grade, third grade. They were used for special examinations of tracts of contract land that had reverted, or any other special examination.

Whereupon defendants offered and there was received in evidence as a representative sample of a report of a land examiner, Defendants' Exhibit 358, which is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that he does not think that these Defendants' Exhibits 343, 344, 353, 355, 356, and 357, which are based upon cruisers' reports in his office, include any lands cruised prior to April 18, 1906, reports of which were made before the fire and burned in the fire. The cruisers' reports of the company which were in existence prior to April 18, 1906 were all taken to San Francisco, and he presumes were burned in the fire, that has been his understanding. These tabulated statements would show only a very small portion of the lands actually cruised based upon existing records, and do not show all of the lands which he cruised from time to time since he became an employe of the company, down to date, nor very few of the lands cruised by F. A. Elliott, and there were quite a number of cruisers at various times whose reports the company does not have; cruises that were made previous

to the time the records were taken from Portland. The cruisers' reports of N. E. Britt, for instance, were sent to San Francisco along with the others, and he presumes were destroyed in the fire. The cruisers reports made by F. A. Elliott, other than these showing that he cruised apparently about 2,000 acres, were sent to San Francisco, and these tabulated statements only show a portion of the total cruises of these parties that did work before the fire of April 18, 1906. He has prepared or caused to be prepared a map which reproduces on the map, the location of the various tracts cruised by these various parties whose reports are tabulated in these exhibits, and Defendants' Exhibit 342 is such map, and that map, he believes, to be substantially correct. It may include a few lands or tracts not shown in the statements but does not include any lands that have not been cruised, as shown in these colors. The 880 acres which he cruised in Multnomah County is in the eastern part of that county. The 875 acres of that total of 880 acres classified by him as timber, is Douglas fir, generally called yellow or red fir, and the lands are chiefly valuable for timber. The five acres classified by him as agricultural, is land that has very little timber on, level enough to farm and plow, and fairly good soil. These parcels or acres classed by him as agricultural in their present condition, are generally situated along the creek bottom, while the other land extends back on the hillsides, although there are a few sections where it is bench land, level benches, with fairly good soil and level enough to

cultivate and not too many rocks. These agricultural parcels are isolated and widely separated from each other. His classification as grazing when denuded, includes all lands that are not classed as agricultural land. It might be worthless land, or any land not classed as agricultural land. Some localities make fairly good grazing land after they are denuded of the timber. Other localities are very poor, and there are some places where the lands are classified as grazing lands that have no apparent value for any purpose on account of being very rocky and no forage of any kind. A timber eighty, where the eighty is covered with an excellent stand of merchantable saw timber, he classifies as grazing after the timber is cut off and becomes what is called logged-off land. Usually one would have to do considerable clearing of brush, of lands that can be used for grazing purposes. The brush grows up very quickly after the lands are logged-off and they would have to be cleared to a certain extent, not to the extent of taking up the stumps, but to the extent of clearing it of brush and logs. There is a great deal of that land that could not be used at all for grazing. When the merchantable timber is logged off of these tracts of land, there is considerable of timber left of inferior quality, not suitable for milling purposes. The lands which were cruised in Clackamas County generally lie along the Clackamas River, where they include the bottom lands along the river, extending back onto the hills to some extent, but they cover lands that have more than an average of agricultural land. The

difference in the amount of grazing lands in the percentage in their present condition in the counties of Multnomah and Clackamas, as compared with the counties of Douglas, Josephine, Jackson and the other counties named in his statement of lands lying west of the Willamette Meridian, is, that in Clackamas and Multnomah there are large burns, considerable of that land examined was on burned sections that had no timber at all, or scarcely any, and these burns were generally classified as grazing lands, A large burn is in 1 south, 2 south—5 and 6 East, Clackamas County, Oregon, of rather high elevation as to a considerable portion, probably 2,000 feet to 4500 feet. These burns are usually covered with dead snags, trees that were killed years ago, and the trunks fallen down to the ground, and the ground usually covered with brush. These burns are generally covered with different kinds of brush, briers, and some wild grasses, and some places there is fairly good soil, and a great many places it is very rocky, and in most of the old burns the soil is very gravelly and unproductive. He cannot tell exactly when he began work for the company, but it was ten or twelve years ago—he knows it was more than ten years ago. He began in the capacity of timber cruiser, and before he commenced to cruise for the company he had been in the saw mill business, worked in timber for a number of years, ever since he was a grown man, the greater part of the time. He has done considerable cruising in Washington County, probably from one-half to three-quarters of the land that the company owns in that county,

and he thinks he has cruised at least one-half of the unsold lands of the company, inuring to the company under both grants, in that county. He has cruised nearly all of the lands in Multnomah County. He cruised with one other cruiser at one time, when they would take alternate sections, and he had been in Multnomah County at various times to cruise other sections. In Yamhill County, he presumes he has cruised only about seven or eight sections, but has examined quite a number of tracts. When he made an examination he would go on to the section and might go once or twice across it, making a general report of the character of the land, and not make a cruise of the timber. These examinations would enable him to tell in a pretty accurate way the character of the timber as well, or practically as well as to make a cruise of the timber. He thinks he has seen every section in Yamhill County that the company owns, but he has not made reports on every section. He supposes he has cruised about fifteen or twenty sections in Clackamas County, but has examined a considerable portion of the lands. There are some lands in Clackamas County, considerable, he has never made any report on, but went through and looked over in a general way, to get an idea of the character of the land. He has cruised about one-fourth of the sections in Polk County, but is familiar with practically all of the lands in that county. He does not remember of cruising but a few sections in Marion County, that is, making timber cruises, but has examined the greater portion of the lands in Marion County.

Referring to the map, Defendants' Exhibit 342, in the preceding testimony and in his subsequent testimony, he could tell better which lands he had examined and cruised, than from memory. He cruised about one-fourth of the lands in Lincoln County. He does not remember that he examined any lands in Lincoln County excepting in 13 South, 8 West, and two or three sections on the south side of 12 South, 8 West. Defendants' Exhibit 342 shows the boundaries of the various counties. He has cruised about one-third of the lands in Benton County. There were three cruisers there together, taking alternate sections, when he worked there. He does not remember of having made any special examinations in Benton County, although he has been through that county a number of times, and over the lands at different times. He has actually cruised only a small portion of the lands owned by the company in Linn County, and he does not remember of having made reports on more than probably ten per cent of the lands in Linn County. He has been over the lands in Linn County pretty thoroughly at different times. At one time he had a gang of cruisers in Linn County on the Santiam River. They camped at 12 South, 3 East, began at 11 South, 3 East, in the upper northwest corner of the township, and did some cruising there. By examining a piece of land he means that he has gone to the land and made an examination for some special or other purpose. Some times it would be to determine whether there were any improvements on the land, and he would then make a formal report

of such instances, such as has been introduced in evidence as one of the exhibits in his testimony. There was a party of three cruisers, of which he was one, in Lane County which cruised Township 15 South, Ranges 6, 7, and 8 West; 16 South, 6, 7, and 8 West; 17 South, 7 and 8 West, at one time. He presumes he cruised one-third of the land. He cruised considerable of the lands in 15 South, 1 East and 1 West; 16 South, 1 East and 1 and 2 West; 17 South, 1 and 2 West; some few sections in 20 and 21 South, 1 West, and cruised, or was actually with a party of other cruisers, of which he was a member, more than half of the total of 299,606 acres in Lane County, but it would be pretty hard to tell what proportion of this total area, outside of what he cruised or participated in cruising, that he examined or made an examiner's report. He can remember a great many sections that he made some report on. He knows the character of and has been over the greater part of the company lands in Lane County. He thinks he has cruised or has been in a company with cruisers in which he participated, of about one-eighth of the 616,843.14 acres owned by the company in Douglas County. He had made examiners reports only of a small portion of the lands in that county. He has been over about all of the balance of the land that he did not actually cruise or examine. He thinks he has been in every township probably, over the lands wherever there is any road or trail, and a good many places where there is not, and he can tell the character of most of the lands. He never did a great deal of cruising of the company lands in

Coos County. He has been over the greater portion of the company lands in Coos County. He has been over the company lands in Curry County, but never made a cruiser's report of the company lands in that county. He is acquainted with the character of a greater portion of the company lands in Curry County, he thinks. He has only cruised a very small portion of the company's lands in Josephine County. He has been over them very often, and made quite a number of reports of various kinds in special ways on different tracts. He was with a party that cruised six townships of the company's lands in Jackson County, and there are three sections, he thinks, upon which he made reports, and he is acquainted with the greater part of the lands of the company in Jackson County. He has actually cruised or been with a party of cruisers and participated in the work of cruising all of the lands of the company in Klamath County. He presumes he has cruised, or been with a party who has cruised one-fourth of the lands in Columbia County, and has been on the greater part of the balance of the sections in that county. He does not remember that he ever made a cruiser's report on any lands in Tillamook County, but he has been generally over the lands in that county belonging to the company, enough to have a fairly good idea of the character of the land, and can tell pretty nearly what they are. The lands that the company retained there are generally pretty rough, and a part of these lands is heavily timbered, and their chief value is for the timber, he would say, the timber land. Taking the entire grant over which

he has examined, in its present condition, he believes that not over four or five per cent of it, is suitable for agriculture, and he thinks about seventy-five per cent of the total area of this land grant in its present condition, in his judgment, would be classified as timber and chiefly valuable for timber only. He would say that about twenty per cent of this total grant in its present condition, in his judgment, would be classified as grazing, including old burns where there is some soil and timber but not suitable or valuable for timber, and including also lands that are rocky, barren or unfit for any useful purpose, and making three classes, timber, agricultural and grazing. He may have the timber estimate too high, he does not know, but that is approximately correct, he thinks, as nearly as he can tell. There are lands, if the timber is cut off and cleared, that could be used for agricultural purposes, lands that are level enough and soil good enough. From his knowledge of the grant, such lands that could be thus cleared and grubbed and made available for plowing after the timber is removed, that would be classified as agricultural, would be a pretty small per cent, especially a small per cent that the value of the land would justify the cost of clearing. He has made some inquiry at different times about the cost of clearing, and has cleared a little bit of land himself. There is a great deal of this land where it is heavily timbered that he does not think could be cleared for less than $100 an acre, that is, cleared of stumps, and some of it much more than that. He presumes there are places where it might

cost $500 an acre to clear an acre of land, but he would place the general cost for clearing timber lands at from $100 to $150 an acre; it would be above $100 an acre, the average over the grant. In some places in the Willamette Valley, he thinks, good agricultural land can be purchased for that price, clear, or comparatively clear of all timber. He only knows by hearsay and what he knows of land selling for as to the range of prices of agricultural land five or six miles away from cities, convenient to transportation, in the old settled part, say in Marion and Yamhill counties. It can be bought from $50 to $150 an acre.

Defendants' Exhibit 362 was tabulated from Defendants' Exhibits 343, 344, 351, 353, 354, 355, 356 and 357. It is a compilation from these other exhibits. These exhibits, including Defendants' Exhibit 362, are based upon cruisers' reports in his office. They do not pretend to cover or include any cruising made prior to April 18, 1906, reports of which were destroyed in the fire. They include practically all the cruisings made since that date which are in his office. There are a few that were missed in making up the statements, but the acreage is approximately correct; fractions are dropped sometimes. Defendants' Exhibit 362 is substantially correct, and Defendants' Exhibit 342 is correct, he believes, although some places where more than one cruiser would cover more than one section, the coloring on the map could not show both. It showed the last cruise made. He did not discuss with Elliott what his best testimony would be, or in any way influence Elliott directly or indirectly as

to his testimony, and there was no promise on his part directly or indirectly expressed or implied to induce Elliott to testify, and none by anybody else to his knowledge. Oswald West was Governor at the time Elliott was appointed State Forester. He is not acquainted with Buxton of Forest Grove, but believes that he represents the Oregon State Grange as a member of the Oregon State Board of Forestry. Geo. H. Cecil is a member of the United States Forestry Service. It is his opinion, but he is not sure that George W. Peavy represents the Forestry Department of the Oregon Agricultural College. The Oregon and Washington Manufacturers' Association is made up of timber and mill men of Oregon and Washington. The Oregon Forest Fire Association is an association of timber owners of Oregon. The Oregon and California Railroad Company is not a member of this association, or of the Oregon and Washington Lumber Manufacturers' Association, but it maintains its own fire patrol, excepting in one or two places, where the company has a joint patrol with other people.

Whereupon defendants offered and there was received in evidence Defendants' Exhibit 362, which is hereinafter set out and described and made a part of this statement of the evidence and identified as such.

Whereupon witness further testified that he is not acquainted with R. G. Balderee, but knows he is one of the intervenors or persons claiming to be intending purchasers of some of these unsold lands of the company.

Defendants' Exhibit 363 entitled "Map of the State

of Oregon published by the J. K. Gill Company, Portland, Oregon," is the best map he could get of the State of Oregon. The colors traced on Defendants' Exhibit 363 correctly outline the two grants, with place and indemnity limits.

Whereupon defendants offered and there was received in evidence Defendants' Exhibit 363, which is hereinafter set out and described and made a part of this statement of the evidence, and identified as such.

Whereupon witness further testified that Defendants' Exhibit 363 is as clearly correct as any map that is published, and the map shows a fairly accurate location of the lines of railroad of the Oregon and California Railroad Company, Southern Pacific Company, Oregon Electric Railway Company, S. P. & S. Ry. Co., and O-W. R. & N. Co., and other lines, and nearly as actually constructed and operated. The Pacific Railway & Navigation Company, running through Hillsboro by way of Butxon and Nehalem River, to Tillamook Bay and Tillamook, is in operation at the present time. It was completed in the winter of 1911 some time, but he does not remember the date. The hatched dotted lines show proposed railway lines. At the time this map was published, the Oregon Electric is shown as a proposed line from Salem to Albany and as far south as Eugene. This has been constructed and opened for traffic very recently, if it is open at all; he is not certain that it is. Its completion was celebrated recently at Eugene, on October 15, 1912. The road indicated by dotted lines from Springfield to be constructed by the Oregon and Eastern

to Klamath Falls to connection with the constructed line at Klamath Falls, is in operation from Springfield to or above Natron, and under construction from there on to Klamath Falls, and is a mountain road part of the way. The road marked "P. and E. Railroad," from Medford in Jackson County, is in operation from Medford to near Butte Falls. The proposed railroad from Drain down the Umpqua River to Marshfield, has not been constructed. It was attempted to be constructed by the Southern Pacific Company, but has been abandoned. The Willamette Pacific Railroad Company, an affiliated or subsidiary line of the Southern Pacific Company, is constructing a line from Eugene westerly to the coast, down the Siuslaw river, in what is known as the Siuslaw country. The Corvallis & Eastern Railroad shown on this map from Newport or Yaquina Bay, through Corvallis, Albany, on to Mill City, or a point just east of Mill City, is in operation. There is some level land along the creek around Mill City, with mountains on each side. The character of the country is generally mountainous, with timber growth. He is not certain if that timber growth extends further than Detroit, if so far. That appears to be about ten or twelve miles east of the eastern boundary line of the 30 mile or indemnity limits of this grant. The general character of the country as to quality of timber in that section is good yellow and red fir.

Whereupon on cross examination, witness further testified that he marked these boundary lines shown on Defendants' Exhibit 363, showing the limits of the O. & C. land grant, but these limits were not traced on that

map prior to any work done by him. The only thing that he had to do with the preparation of the map was the marking of these limits, of the boundaries of the grants, and re-tracing the line of railroad of the Oregon and California Railroad Company. That is a stock map purchased from J. K. Gill & Company. He looked the map over carefully and considered it as good a map as there is published of the State of Oregon. He thinks that the line of road leading from Tillamook mentioned in his testimony, is recognized as being a part of the Southern Pacific Railway System. The proposed road leading from Eugene to Marshfield, is said to be a part of the Southern Pacific System, and the work has recently been started and they are doing work there now, but he is not able to say how far; the actual construction has been going on less than a year. The road from Springfield around to Klamath Falls, he believes, is what is commonly termed a cut-off of some kind, and is reputed to be a part of the Southern Pacific System from Springfield down to Klamath. The road running from Eugene to Springfield has been in operation for many years as part of the Southern Pacific System, but there is another branch of the Southern Pacific Company from Woodburn to Springfield, which has been in operation for a number of years as part of the Southern Pacific System. The road leading from Albany through Gates and Mills City, commonly termed the Corvallis and Eastern, is said now to be a part of the Southern Pacific System. His knowledge of the ownership of all this road is by common repute and by his connection

with the Railroad Company and riding over the railroad lines.

In cruising lands he generally used what is called the "double run" cruise; that is, running twice through each forty acre tract, making his count of two acres on each cruise, giving four acres in a forty acre tract, and making the estimate on that. A timber cruise is approximate always. In Southern Oregon where the timber is more scattering, he often made a tree count, that is, count all the trees on the forty, but the general method as described by him, applied more to Northern Oregon, to the Douglas fir district. Grazing land includes all land that is not classified as timber or as agricultural land, whether it has any special value for grazing purposes or not. Some forms of his reports have three different grades of grazing lands, as good, fair, or poor, but these are examiners' reports instead of cuisers' reports. They use examiners' reports when making special examinations for any certain purpose, where they do not care for a cruise of timber, and he presumes it would be used where there was an application to purchase agricultural lands, if they had such application and were making examinations for that purpose, no doubt he would use the examiners' report. It goes a little more into detail than the cruisers' report does. The examiners' reports contain no blanks for estimates of the amount of time on the land, or for timber cruisers' reports. He does not remember when they began using these examiners' reports, but thinks it has been about four years. They had two or three different forms of examiners' blanks prior

to the time they began using the present blank, different from timber cruisers' blanks. He does not remember that they had any blanks for making reports at the time they used the book form. This book form was the only one used, that he remembers of. There is some fairly good grazing land within the limits of this grant, but the amount is very limited. There is a large burned area in Clackamas County. This is usually very rough land, covered with dead trees, down logs, overgrown with brush, and would be very expensive to clear, and it is a high altitude. Some of it at an elevation of 4500 feet. One place that he remembers of, according to the aneroid, is 4700 feet, and he would judge the minimum altitude to be 1500 or 1800 feet. There are several townships that are entirely denuded or partly denuded of timber in that burn, but the fact that that land has been burned over would not alone render it incapable of cultivation. In making these cruises shown on Defendants' Exhibit 342, there would be several cruisers who would go into some township or locality, and one of them would take one section, another would take another section, and in that way they would cruise the land, and usually they had a compassman to run the lines or make the location for them. He does not mean to say that he could state accurately the character of every particular tract of the grant in Lane County, but generally speaking he is familiar with the lands in Lane County, and he thinks he could state accurately the purposes and uses to which these lands could be applied, judging from whether other lands are being used of like character and what they

are being used for, if used at all. That is not what he bases his opinion on altogether. There is considerable land that is too rough to be used for any purpose unless for grazing purposes. It would be pretty hard to take a township in Lane County and describe section by section the lands in that township, but there are some townships in which he can remember almost every section. Perhaps he could not recall every section in very many townships without referring to the plats or maps, or something. He was cruising this land at the time of the fire, and cruised some lands after the fire. A great deal of the land that he was over, was for making special reports of different character. The greater portion of these cruises have been made since 1907. He had cruisers at work engaged in cruising this land from 1906 to the present time, and has cruisers at work now, and has Bruce, McLennan and McLeod working now as cruisers, but no others at work now. McLeod is not cruising timber all the time, but is part of the time on other work than cruising.

Witness has not had a great deal of experience himself in farming in the last twenty years. He was raised on a farm until he was grown, and he has been around among the farmers a great deal in connection with this work. In the work he has got to go over the country and stop at farm houses sometimes. The farm he was raised on was in Vermilion County, in Ilinois, at the edge of the timber. The whole area there was prairie south of the timber where they were, and there was prairie north of the timber. The earliest settled portion in that

locality was not in the timber, they settled along the edge of the timber. The farms were usually along the prairie, but near the timber. Extending south from the timber, where he lived, there was no timber for a great many miles. He does not think that that land in this vicinity in Illinois, was ever covered with underbrush and timber at one time. It was covered with prairie grass—open prairie—as long as he can remember. He has been south of that place on the border between Illinois and Indiana, around Perrysville or East of Danville, and south, and a great deal of that was timbered country. He cannot say whether or not it has been cleared off and is practically all under cultivation at this time. He has not been there recently. He has farmed in Oregon at Newburg, Yamhill County, owning some land there and farming it one season, but does not remember the section, township and range. This was in 1882 that he owned that land; after that he had it farmed by other people. He had about seventy, or a little less than eighty acres. It was near Newburg, at a little place called Spring Brook, and the farm cornered at the station at Spring Brook, or within two hundred feet of it, lying west and north of Newburg, about two miles. It was part of the Heater Donation Claim. He has owned no other land excepting a small tract that he now owns, which he has farmed; it is outside of the city limits; they raise potatoes and garden stuff, and berries on it, but he does not hold it as a farm, but as an investment. He has been employed by the company and engaged in its land work something more than ten years.

Whereupon, on re-direct examination, witness further testified that the timber cruising method described by him, is generally used by all timbermen for a basis for purchasing or selling timber lands, and it is a reasonably safe guide to ascertain the value of the land. These examiners' reports referred to by him were for the purpose of ascertaining the particular character of any particular piece of land trespassed upon, or where the contract was forfeited, or where the circumstances required special investigation other than cruising.

Whereupon, S. C. BRUCE, called as a witness on behalf of defendants and being duly sworn, testified that he resides at Portland, Oregon, and is a timber cruiser, and has so resided since October 1911, and before that resided in Jackson County about seven years. He has been engaged in the business of timber cruiser for about eight years, for Standard Lumber Company and Fidelity Lumber Company of Newport, Washington, and in grading lumber sold by both of these companies. He has been employed by the Oregon and California Railroad Company since August 1907, examining lands and cruising timber, and he is still in its employ, engaged in that business, reporting to A. W. Rees, Manager of the Portland office, having charge of matters relating to the lands of the company. Defendants' Exhibit 342, shows the lands that he cruised. Whereupon defendants offered said map, Defendants' Exhibit 342, in evidence, purporting to show lands cruised and examined by S. C. Bruce, S. A. Carmichael, C. A. Cavell, T. J. Cronin, F. A. Elliott, M. F. Mc-

Cown, John McDonald, D. C. McLennan, L. D. McLeod, Ben Peck, William Penoyar, and A. W. Rees, showing in the legend a color for each of these persons, under promise to call each of the other witnesses, and particularly A. W. Rees, to show that the map correctly tabulates, and by these legends shows, the lands that these parties cruised.

Whereupon said Defendants' Exhibit 342 was received in evidence, and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified as such.

Whereupon witness stated that Defendants' Exhibit 343 shows the lands that he cruised, being a tabulated statement of such lands, showing a total acreage of 170,309 acres, and showing present condition of this acreage as, timber 134,312 acres, grazing 27,133 acres, agricultural 8,864 acres, and when denuded, grazing 132,669 acres, agricultural 37,640 acres.

Whereupon defendants offered said tabulated statement in evidence as Defendants' Exhibit 343, to which complainant objected as incompetent, irrelevant and immaterial. And it was agreed between the parties that this same objection should be considered as taken to all testimony of this witness relating to the character of the lands within the limits of the grants, settlements thereon, and public land entries thereof. Whereupon the same was received in evidence, and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified as such.

Whereupon witness further testified that this tabulation or statement, Defendants' Exhibit 343, correctly states the proportions of these lands and the classifications according to his reports as they were compiled and tabulated, and according to his examination as made in the field. He classified as timber lands that would have 100,000 feet or over to the forty acres, and he classified as grazing in the present condition, land that had no timber, and as agricultural in the state of nature land that was level enough to be tilled and land that was not too stony or rocky. Under the column "When denuded" and under the column "Grazing", showing a total of grazing lands examined by him when denuded, of 132,669 acres, there would be a certain per cent that was agricultural and a certain per cent grazing. By classifying land as grazing, when denuded, he means land that is level enough to be farmed or tilled, put into cultivation, after the timber has been cleared off and the stumps are grubbed and the brush burned, etc. He classified land as agricultural, when denuded, which would be level enough to work, to farm, for tillage, after the timber had been removed and stumps extracted. That is, if he found a forty that might have a very heavy stand of fir timber, but that was sufficiently level, that it could be plowed, he would classify that, as agricultural when the timber was denuded. If he found a tract of land that was rocky, or the soil of which, was not fit for cultivation or for agriculture, he classified that, as grazing when denuded. So that all the land that he examined or cruised was put by him into two classes

when denuded, one grazing and the other agricultural. He has not made any allowance for lands unfit for any kind of vegetation. There is a certain portion of these lands classified by him as grazing lands, which he supposes would be too steep for any kind of crops, but he thinks it all could be used for grazing. Some portions of this grant in Jackson County, is worthless on account of rocks and chaparral. The general character of these lands in Coos County was that they were all heavily timbered. In order to put these lands into the class of grazing lands, the timber would have to be all removed, logged off and seeded down, if there was not sufficient grass there for grazing. In spots, there is grazing in these Coos County lands. There is wild pea vine.

Q. What you mean, then, as I understand you, is, that if the timber is cut down, and the brush and debris burned after it is logged off, and sowed to grass, grass seed, that there would be some sort of grazing that could be had on these lands?

A. Yes, sir.

Q. Mr. Booth has testified that that would be the condition of a certain per cent of the lands owned by the Booth-Kelly Lumber Company in the eastern part of Lane County, and that that would be the process by which the land could be made grazing. Is that the same classification (or the same understanding that you have of this definition) of grazing that you have made?

A. Yes, sir.

Whereupon witness further testified that in classifying 1285 acres of the total acreage cruised by him in Coos County, as agricultural when denuded, he means land that was level enough to be farmed and cultivated after the timber was taken off. By the 110 acres of this total area cruised by him as adapted to agriculture, he refers to lands generally on a bottom, somewhere along a creek, and would not be all together, but would be in small, irregular tracts, where there was no timber. The 110 acres in section 33, township 27 south, 10 west, is land that was on top of a bench of the mountain, was level, and there was no timber on it, and he classified it as agricultural in its present state. The 15,197 acres classified by him as timber land in Coos County, would go close to 40,000 feet per acre, which is a heavy stand of timber. The timber in the main, in Coos County is yellow and red fir, with some cedar. The timber in Marion County cruised and classified by him is yellow and red fir, and would probably go 25,000 to 30,000 feet to the acre. The land classified by him in Marion County in a state of nature as grazing, was open land, upon which there were fern and old snags in places. It had all been burned over years ago. In places, it is rocky. Where he thought it was too rocky to be classed as agricultural land or unfit for the plow, he classified it as grazing, so that this acreage of 3845 acres in Marion County, classified by him as grazing, was so classified if it was not timber or agricultural. Wherever there was soil suitable for agriculture, or land that was level enough for such, he classified as agricultural. If it was

not too rocky and there was no timber, he would call that grazing land. He made no class for lands that were absolutely worthless, but considered that to be a certain grade of grazing land, and he did that all through the lands in these counties that he examined, so that the grazing classification includes all the lands excepting those that are covered with timber, or that are agricultural. In this compilation of the total acreage of lands examined by him of 170,309 acres, he made three classes in their present condition, timber, grazing and agricultural, and these are the same lands classified into two classes, grazing and agricultural, when the timber is cut off, and he has made no class of lands that were rocky and unfit for any purpose. He has put all in as grazing land or agricultural. In making his reports of his examinations to the company, he used the regular cruise report blank of the form of Defendants' Exhibit 261, and in making his examinations shown in Defendants' Exhibit 343 he used the form Defendants' Exhibit 266, and filled out the blanks as indicated. In making out these reports he filled in these forms as nearly as he could in every particular, where there was a blank to be filled, and made out a report for each section that he cruised, and this would apply to all of the lands that are described in Defendants' Exhibit 343.

Whereupon defendants offered in evidence Defendants' Exhibit 343, which was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified as such.

He prepared Defendants' Exhibit 343, excepting copying, and he prepared the data from his reports, and it is a correct reproduction of the facts stated in his reports as far as they are shown in the exhibit, and is correct. These original reports are in the office of the Land Department in the care of A. W. Rees.

Q. Suppose an actual settler, or any person should want to go on one of these quarter sections that you have classified as grazing when the timber is taken off, or in its present state where it is grazing, and for the purpose of making a living, supporting himself and his family, and his opportunity for that was confined to this quarter section, and he was required to make his living from the uses to which he put that quarter section for grazing purposes, state to the court whether or not such person, or any person under such circumstances, could support himself and his family on this quarter section of grazing land?

A. It would be doubtful.

Whereupon witness further testified that one head of stock could be supported upon about 20 acres of a quarter section of this grazing land as classified by him, confining the stock to that quarter section. That would be about eight head of stock for each quarter section. A man and his wife and family might make a living on eight head of stock pastured on 160 acres if the land was not too steep. He hardly believes a man and his family could make a living on eight head of stock supported on this 160 acres, although he never tried that kind of an

experiment and never saw anybody else that did. He has heard of people taking numbers of goats in the mountains back on the range somewhere, where they would probably have 1000 acres, but not on 160 acres.

Whereupon, on cross examination, witness further testified that he commenced to cruise timber in the fall of 1909 and devoted his time, until the present time, to cruising these lands. He personally cruised all of these lands reported in Defendants' Exhibit 343. He had different parties assisting him in that cruise, the others were compassmen, he was the cruiser, and these other men were working under him as compassmen and assistants.

Whereupon L. D. McLEOD, called as a witness on behalf of the defendants, and being first duly sworn, testified that he is thirty-six years of age, resides at Portland, Oregon, and is employed at the present time as a cruiser for the Oregon and California Railroad Company. He commenced to work for the company in 1908 as a compassman or land cruiser, mostly cruising land the first year. He was then off and came back he thinks in the latter part of 1909. Anyway he has been in the employ of the Company enough to make about four years. He has had practically the last three years' experience in cruising, ever since 1909. Before that he had been out with the cruisers running compass, and did considerable work alone in making examinations of different kinds before he commenced cruising. In making cruise reports he used standard blanks, such as Defendants' Exhibit 266. Defendants' Exhibit 266 consists of three reports

prepared by himself and three that would seem to be reports of D. C. McLennan. In making his reports on all of the lands for the company, he used that form of report and returned these reports to A. W. Rees, acting agent or manager in charge of the office of the Company at Portland, whose superior is B. A. McAllister of San Francisco. Referring to Defendants' Exhibit 344, purporting to show that he has cruised in all 65,681 acres and Defendants' Exhibit 342, he says that he supposes the map shows correctly the lands which he cruised, to which testimony of the witness complainant objected as incompetent, irrelevant and immaterial and it was agreed that the same objection should be considered as taken to all testimony of this witness relating to the character of the lands within the limits of the grants and settlements thereon and public land entries thereof. Whereupon witness further testified, that as far as checking that exhibit with the map, he had not done it. That was done under the direction of Rees, but he prepared the tabulated statement, Defendants' Exhibit 344, from his cruise reports and he would say that Defendants' Exhibit 344 is approximately correct; and by that he means in putting in the acreage he had not used the fractions; and aside from the fractional lots, as to the acreage, which covered a very few acres, the statement is correct. The classification in timber and grazing and agricultural, is based upon his judgment of the lands from an examination made in the field, and upon the form of report, Defendants' Exhibit 266, which he used. By the term timber, used by him in his classification, he included lands that were

more or chiefly valuable for timber than for grazing or agricultural purposes. Lands that were classed as "agricultural" in a state of nature, were those that could be cleared and cultivated. Often lands were classed as agricultural lands, the value of which would not justify the cost of clearing. Agricultural lands were such as could be cleared and cultivated. He had three classes of land in the present condition, one timber, another grazing and another agricultural. When these lands are denuded he has only two classes, grazing and agricultural. All denuded lands that could be cultivated, if cleared, are classed as agricultural, whether they were heavily timbered in the original state or not. The lands that were not classified as agricultural when denuded, were classified as grazing, regardless of whether they were fit for any purpose or not. He has not made any classification of lands other than grazing that are unfitted for any purpose. In Clackamas County, according to the classification made by him, in their present condition, there is an area of 16,358 acres of timber lands, and 31,297 acres of grazing lands in a state of nature. Practically all of that country has been burned over, leaving spots of timber in the lower lands, and high benches, where it was damp and moist, and the grazing lands have been burned over. The timber has been destroyed, and some of the lands there that are classed as grazing, are really too stony and steep for any purpose. In the 4288 acres in Clackamas County classed by him as agricultural, in their present condition, are lands that could be cleared and cultivated, or at least level enough to clear and cultivate. In the

second classification of grazing when denuded, of 44,138 acres in Clackamas County, there is included a part of the timber lands, when denuded, and a part of that old burn that has been classified as grazing. There is a small per cent of these lands that would be grazing under present conditions, at this time. A greater part of it, before it would be of any great value for grazing would have to be cleared and seeded, and some of it classed as grazing, could not be made grazing under any conditions, because it is too steep and stony. Some of it is mountains of rock. The increased classification of agricultural land from 4,238 acres in a state of nature, to 7,755 acres when denuded, results from the lands that would be cleared where too heavily timbered to be agricultural without clearing the timber away. He supposes he has a general knowledge of the cost of clearing these timber lands and it would cost anywhere from $75.00 to $500 an acre. There is quite a difference as to the cost of putting these so-called grazing lands, where they are capable of being made grazing, either by cutting the timber off, or cutting the brush off and burning it, and seeding it into pasture, but he would judge it would run anywhere from $10.00 to $75.00 an acre approximately. He does not mean where he would grub the stumps off the land for grazing purposes. If a person was going to clear it, though, and cut the brush off and burn it and put it in good shape for grazing or for pasture lands, it would cost considerable to put some of that land classified as grazing land, and that would produce grass; some of it he would say would cost $75.00 an acre, even for grazing purposes.

For a man to log off the land that was heavily timbered, then run a fire through it, burn up the brush and the rejected saw timber, timber that was not fit for logging, then go over it by hand, and sow the grass seed in the ashes, it would make grazing, but it would not be nearly so good as if one went over it and burned all the logs. It is hard to burn things off clean with a fire that way, without slashing. There is considerable timber left, as a rule, when these lands are logged off for commercial purposes. The timber left is too small to pay for logging. There are a lot of logs and tops of trees left in the ground after logging, and there is a certain percent, chiefly unsound or punk trees, left standing, depending upon how much there is that would be unsound.

"Q. Now, suppose a man were to go out there in this country on any of these lands that you have cruised, and examined, with his wife and family, and was expected to make a living on 160 acres of these grazing lands, confining his herd or his stock and its increase to 160 acres that he would buy, what is the fact, if you know, as to whether a man could support himself and his family by such use of this land or any of it?

A. He could not do it.

Q. Suppose a man would go out there as a so-called settler, and get some of this best timber-land, a quarter section of it, which you cruised, and was expected to settle on the land and support himself and family, if he had one, by living on that land, making a home on it, and it had commercial timber on it, what would you say

would be his ability to make a living?

A. He could not possibly make it.

Q. What would he have to do with this land covered with timber in order to get his money back, if he bought it, say, at $2.50 an acre?

A. He would have to sell the timber sure.

Q. Well, would it be necessary for him to live on it, to be an actual settler, in order to sell the timber, or could he come to town? If he had a quarter section out there worth $10,000, for the timber, he could sell it, couldn't he, without being a settler on it?

A. Yes, if he had a deed to it.

Q. That is what I mean.

A. Yes."

Whereupon witness further testified, that a commercial stand of fir timber in this state, considered sufficient to make the land chiefly valuable commercially for timber, depends a lot upon logging conditions and the amount of timber adjacent and how large a body of timber one has. The 6.77 per cent, shown in Defendants' Exhibit 344, means that there is 6.77 per cent that could be made agricultural land, or could be cleared and used for agricultural purposes rather and that it is not timber land at the present time. The 12.44 per cent under the column "When denuded," means, that there would be that per cent of the lands more valuable for agricultural purposes than for any other purpose after being denuded of the timber. Under that classification, the balance of

the entire 65,681 acres would, when denuded, be chiefly valuable for grazing, where the land could be used at all. When making these reports and making up this memorandum, he did it with the knowledge that there is really considerable of these lands that could not be used for any purpose and are really of no value for any purpose whatever. He has not undertaken to segregate in these compilations, a class of worthless lands. He would consider lands worthless that are really too stony or steep to grow grass, or to be used for any purpose to produce anything on. There is a considerable percentage of these lands, included in Defendants' Exhibit 344 in that class. He did not classify them in the reports, while he knows there are considerable. In this table, they are classified as grazing lands. Agricultural lands, other than this 65,681 acres in a state of nature, is not all found in contiguous bodies. Those lands that are classified as agricultural lands, are generally found in patches along small streams or creeks and are usually in patches, though one might possibly find them all in one place in one particular section. They are, however, more generally scattered. Defendants' Exhibit 261, being a report prepared by him, February 13, 1912, is a typical illustration of the facts reported by him in all of these reports, depending on each a particular case. In his report of June 13, 1910, the SW¼ of Section 33, Township 1 South, Range 6 East, Willamette Meridian, Clackamas County, Oregon, containing an estimate of the total feet, board measure, 8,310,000 of the value of $9,422.50, is classed as timber and valuable for the timber on it. That value is possibly

a little above the average, compared in value with timber quarters generally, though he has seen quarter sections cruising from 15 to 20 million feet. The timber lands that he has been over, he would judge would cruise something like six or seven million to the quarter section, which is a fair average. Yellow fir has been estimated in this valuation at $1.25 per thousand feet, board measure, cedar at $1.25 per thousand feet and hemlock at 75 cents. This tract is two miles from Little Sandy, with favorable logging conditions and that would be a fair valuation, he thinks, to place on timber in that locality. Whereupon defendants offered in evidence Defendants' Exhibit 344, which was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified herein as such. Whereupon on cross examination witness further testified, that he has been cruising timber since 1909 and worked as compassman under Bruce, who preceded him as a witness in this case. Before being employed by the Railroad Company, he worked for the Portland Railway, Light & Power Company as a car conductor for about three years. Prior to working for the Portland Railway, Light & Power Company, he did some contracting and was in the wood business in Astoria, and he had some teams there, and he did the same thing in Seattle, and then he was in the cigar and tobacco business for awhile. After he sold out his outfit in Seattle he was in the mercantile business in Denver for awhile, that is, he sold mercantile contracts under the tontine line. He was born and resided on a farm and was in the farming busi-

ness until he was twenty-one. He was born and raised on a farm in North Carolina and came to Oregon about fifteen years ago. His timber experience has been mostly confined to his employment by the Oregon and California Railroad Company. In the South, his father was in the lumber business and interested in the mill business, but the experience of witness in that business was very small before he commenced to work for the Company. The classifications made by him is to show what the lands are mostly valuable for in their natural state. He has classified the lands as agricultural under the head "present conditions"; that is, that they are chiefly valuable for agricultural purposes in their present condition. Referring to such lands as can be tilled and cultivated, if cleared; their chief value is for their agricultural purpose, in their present condition, these lands that are so classified. Practically all of them may require clearing to render them susceptible to cultivation. His work as a cruiser commenced, he supposes, about the latter part of 1910, but he was working with Bruce in the latter part of 1909. Whereupon on redirect examination witness further testified, that he identifies Defendants' Exhibit 268, purporting to be a panoramic picture, or photograph, of certain places in Township 20 South, Range 1 West, taken by Mr. Gifford, April 3, 1912. He was present at that time and recognizes that the photograph is of the lands in that section, township and range. The photograph was taken from Eagles Point shown on the blue print, which is correctly located, with reference to the entire township. The snow peak Mount June, shown

in the photograph on the left, would be outside of the township. These photographs are correct reproductions of the scenes that they purport to record. He was present when the photograph, Defendants' Exhibit 269, was taken by Gifford, showing a point from which it was taken in township 4 North, range 3 West, Columbia County, and he saw the premises shown in that photograph and it is a correct reproduction of how it appears on the ground. He has been in other parts of the grant in other counties than those located in Columbia, Multnomah, Clackamas, Marion, Jackson, Polk, Lane, Douglas and Josephine Counties, shown in Defendants' Exhibit 344. He has been in practically all the counties in which the company owns lands and over the grant considerably in other work. He has been in very nearly every locality in the grant. There are a few localities in which he has not been. He has been over the grant quite thoroughly. He has not been over the lands in Jackson County as fully as he has in other counties, in fact, less in Jackson and Klamath than in any other counties, he believes. He has a general idea of the remainder of the unsold lands in Douglas County, other than those he actually cruised, because he has been over the county quite fully on the different roads leading through the county in different directions, and from his knowledge of the 616,843 acres in Douglas County, he is not prepared to say what per cent is chiefly valuable for timber as well as he would be as to what per cent of lands could be used for agricultural purposes. The lands are heavily timbered he would say. Roughly

speaking, from what he has been over in the grant, he would say a person would be putting it large to say that there was five per cent of these lands in Douglas County that in a state of nature were chiefly valuable for agricultural purposes. The lands in Coos County lie principally in the Coast Range, and he would think that five per cent, in a state of nature, would be agricultural lands. These lands in their present state are chiefly valuable for timber. The per cent of lands in Lane County that would be chiefly valuable only for agricultural purposes, would not run over six or seven per cent in their present state. He would not want to testify as to Linn County, because he had not been over the county as thoroughly as he had over some of the other counties. He has made several trips into Benton County at different places, but would rather not testify as to the lands in Benton and Lincoln Counties. He would judge that the percentage of lands that would be chiefly valuable for agricultural purposes in Marion County would run about seven per cent, and in Polk County about five or six, possibly seven per cent; and in Clackamas County about 6.77 per cent in their present state. He has been over Yamhill County quite thoroughly, but would rather not testify on account of not having examined the lands personally. He has been in Curry County, on several trips, walked 105 miles in three days to go in and out; that is an awful rough country, very rough and broken. The majority of these lands are not very heavily timbered. They are steep and rough. They are not very good even for grazing. These lands are principally on

the Rogue River in a rough country. The per cent of lands that would be chiefly valuable for agricultural purposes, in a state of nature, in Josephine County is rather small, because a lot of them, even the level lands there, are unsuitable for agricultural purposes. There is a granite formation there, and the larger part of the soil is like trying to make a rock produce and the per cent would run not more than three or four per cent, taking the county all the way through. In classifying 3,030 acres he had reported 10 acres that might be used for agricultural purposes, and that is a pretty fair sample he supposes. 1220 acres he classified as grazing in the present state, and in this classification he includes these granite, decomposed, lands. He has been over a considerable of Jackson County, but would rather not estimate the percentage. There is a very small percentage of it that is agricultural, even taking the lands that do not belong to the company, and include the lands that are down in the valley. There is not much valley land down in Jackson County. It is mostly mountainous. He has been over the county in a general way, in different places and parts of it he has been over he has found it very rough, broken and mountainous and there is a very large per cent of it that is not even good for grazing, what he would call good grazing. Outside of the work done on the cruise reports he has made several trips into Columbia, Tillamook and Washington Counties—in Columbia County four or five different times, probably the same in Tillamook and Washington. The unsold lands of the Company, in Columbia County are chiefly

valuable for timber. Of the lands which he has been over in Columbia County he has not seen any that he would think a person could possibly go on and make a living. The lands in Tillamook County are generally rough and mountainous and are chiefly valuable for their timber. He has been over some of the lands in Washington County and they are chiefly valuable for timber, if they have any value. Whereupon upon re-cross examination witness further testified, that besides making cruises he had looked after the lease and trespass work of the company, and that had taken him into different parts of the grant in different localities considerably and some of the lands a number of different times. By trespass work he does not refer to people who have settled on the lands, but to those who have cut timber from the Company's land. He does not refer to those people who have built houses, or cabins, or shacks. He has called on those people in regard to leasing and things of that kind, some who were living on the land at that time. It is the policy of the company to have those living on the land, lease it. He does not mean by trespass any reference to what has been referred to in this suit as the "Lafferty settlers" in Columbia County. He has covered each one of the legal subdivisions shown in Defendants' Exhibit 344 by a report that he submitted to the Company, and that covers all that he has cruised for the company, but not all that he has examined or been on. He would not say that this tabulated statement covered all the lands that he has cruised, because he has cruised some between the times he worked for the Com-

pany and when he was not in the employ of the Company, that is, not railroad lands, but other lands in the grant, within the limits, for other people.

Whereupon W. J. LANDER, called as a witness on behalf of defendants, and being duly sworn, testified, that he resides at Portland, Oregon, and that for the last thirteen months he has been Supervising Fire Warden for the State of Oregon over Douglas County, Oregon. He has lived in Oregon over twenty-five years, and his residence has been Roseburg, Harrisburg and Portland, Oregon. He has lived at Roseburg, Douglas County, about fifteen years and while residing there usually was in the land business; looking up land for himself part of the time. He has done some farming and became acquainted with that business in Pennsylvania, where he was born. He had a farm near Harrisburg, Linn County, but could not say definitely how long he had been engaged in the farming business, although several years in Linn County. He has had experience in cruising and examination of timber, for the purpose of ascertaining the character, quantity and commercial value of timber and is pretty well acquainted with the unsold lands of the Railroad Company in Douglas County. He has been over nearly all of Douglas County during the last twenty-five years, but in the last fifteen years he has been over the greater portion of Douglas County, both timber and farming lands and is well acquainted with the character of the lands owned by the Oregon and California Railroad Company, and other lands in Douglas County. He has examined tim-

ber lands on his own account, for himself and for the Oregon & California Railroad Company; he thinks he has been in the employ of the company as Fire Warden; thinks he was first Fire Warden in Douglas County, about thirteen years ago or more. He has been in its employ as Fire Warden until the last two years and is now acting as Fire Warden of the State Board of Forestry of the State of Oregon. Frank A. Elliott, State Forester, is his superior officer. As Fire Warden for the Oregon and California Railroad Company he patrolled certain districts, watched out for and extinguished fires, if he found them. His duties related to timber lands and his work was particularly active from June 1st to October 1st, of each year. In performing his duties as Fire Warden he patrolled a considerable portion of these lands each year quite thoroughly; that is, by going over the lands, following trails and roads. As Fire Warden for the State Forester, he has supervision of all fire wardens in that county, either State or privately paid wardens. This last summer he had ten federal patrolmen, five paid by the Railroad Company and five paid by the Douglas County Fire Patrol Association, which is composed of timber owners of lands in Douglas County. Some heavy timber owners that participate in this Douglas County Fire Patrol Association are the Musser Lumber Company, the Kribs-Pillsbury people, the Weyerhaeusers, Southern Oregon Company, and Neenah-Oregon Land Company, and several others. He has examined for the Oregon and California Railroad Company in probably all of the

western counties within which the grant lies. He made a good many examinations after the San Francisco fire, in regard to defaulted contracts of the company. The company seemed to have lost the contracts and he would go out and hunt these up. In making these examinations, he would go out on the land and see whether it was timber land or occupied, and when it was bought and whether the purchasers were still there, and he would examine the land as to its improvements, whether it was timber, or grazing or agricultural land and make a report. Whereupon the complainant objected to the testimony of this witness relative to the character of the lands within the limits of the grants involved in this suit and settlements thereon, and public land entries thereof, as incompetent, irrelevant and immaterial, and it was agreed that this same objection should be considered as made to all the testimony of the witness on these subjects. Whereupon witness further testified that these lands were lands that had been sold by the company under contract, but the parties had defaulted and forfeited their contracts. He found that the railroad lands that could be used for grazing or agricultural purposes were about all bought or appropriated in some way, that is, these tracts have been bought. There was no demand for these timber lands until recent years, except where there was a little mill along the Columbia River, or some other river. The character of the land that was in demand, belonging to the Railroad Company, prior to the time, timber became an object of demand, was such that it could be easily

cleared, or was cleared, little prairies that could be used for grazing purposes, situated mainly along the foothills and back intermingled along with other lands up the little streams, sometimes a little prairie along a sidehill that people could use for grazing, where there wasn't much timber. This land was generally bought by people that would want to go out and clear up a little home. Adjacent farmers would also buy them so as to have more pasture, or something of that kind. There was some inquiry for timber lands of this kind, such as these unsold lands in the foothills and mountains, about thirteen or fourteen or fifteen years ago. He has been over Jackson and Josephine Counties quite a good deal; and has been over the westerly part of Jackson County, but has not been further east in Jackson County than up Butte Creek as far as Prospect and Trail. He has never been in the Jenny Creek country and is not familiar with that country. He has not been very much in the Jenny Creek Country, very little. In Jackson County, the timber lands he only examined as to those defaulted contracts, or sometimes where there had been some depredations after the fire, when the company offered to sell grazing or agricultural land. He thinks it was just before this suit was started, the company offered to sell grazing or agricultural lands. Where people applied to buy those lands, sometimes the company would send him down to examine them. His acquaintance with the lands in Josephine County is about the same as in Jackson County, and he thinks he examined those lands that had been applied for, during the times of which he

speaks, as agricultural or grazing, where those applications had been made to the land department. He sometimes found them timber lands, but usually found timber lands and lands not fit for agriculture. He has been some over the lands in Washington, Polk, Yamhill, Benton, Lane, Clackamas, Linn, Marion and Columbia. He has not been in Klamath or Tillamook, but has been some in the Eastern part of Coos County. From his knowledge of the lands in Douglas County, and his acquaintance during the good many years that he has had charge of the fire patrol, he would say that, without clearing, the unsold lands of the company in Douglas County, in their present state, there would be very little, he does not know of any, that could be utilized for agricultural, horticultural or farming purposes. Probably three or four per cent of these lands, if they were cleared, would be valuable or could be used for agricultural or grazing purposes in Douglas County. Some of these timber lands that are heavily timbered, if they were cleared and grubbed, might be used for grazing or some agricultural purpose. Some of the burns might be cleared—there are burns in these timber lands—for probably $50 to $75 an acre, up to $300 or $400 an acre in heavy timber. The chief value of these unsold lands in Douglas County is for their timber.

"Q. Well, why wouldn't it be profitable for a person to buy these heavy timbered lands, or these lands that are more or less timbered, and sell the timber, and then clear the lands and put them under cultivation of some kind? Why wouldn't that be practicable and profit-

able to a settler?

A. It would not be profitable because you could go and buy land already cleared for less money than you could clear them.

Q. Now, suppose that a settler wanted to buy a quarter section of these timbered lands in Douglas County, at $2.50 an acre, and 160 acres in a tract, not exceeding 160 acres, and the company sold it to him and gave him a good title, and he went out there with his wife and children, if he had any, undertook to make a living on that quarter section, what would you say would be his chances of success?

A. He couldn't make a living on it. He couldn't clear enough of it to.

Q. Suppose the company had sold all of these timbered lands in this grant to so-called actual settlers, at a price not exceeding $2.50 an acre, within the last eight or ten years, since timber has become valuable, and had sold them in quantities not exceeding 160 acres, and these actual settlers had gone out on the quarter sections and built cabins, like some of these homestead settlers have done, what would have become of these lands, and what would have been their chief value after they had got title?

A. You could not find these settlers there. They would be just the same as on the even sections, where they have dug out little homes there. The people are not there—they have sold out to timber companies. They are not living there, as a general thing.

Q. Well, why do they not live on these lands?

A. Well, they wouldn't be profitable to stay there. They couldn't make a living on them.

Q. Then, if I understand you, these lands are chiefly valuable for the timber that is on them?

A. That is what I said awhile ago.

Q. And they are not capable of actual settlement?

A. No.

Q. Now, you may state whether or not that same condition obtains as to all of the unsold lands of the Oregon and California Railroad Company in the various counties where you have examined them?

A. The same condition prevails."

Whereupon witness further testified that he made the four reports, identified as Defendants' Exhibit 350. Two of these reports were on lands for which there had been applications to purchase at the time the company was offering to sell the lands. These are his original reports. The company was offering grazing and agricultural land and the applicants applied to purchase Section 19, Township 27 South, as such, but when he examined the land he found it was timber land. He made the examination in the report of March 14, 1912, for 113.19 acres in Douglas County, Oregon, which land was nine miles from Myrtle Creek. That is very fair grazing land and a little grass grows there. It was occupied by J. A. Worthington, and has been enclosed by him for twenty-five or thirty years, and he is the man

that owns the land around it. It includes his farm, but he made no claim. He had it enclosed and used it. The additional 40 acres in Coos County is as shown in his report on November 25, 1911, and the diagram showing a little tract marked in red color, and marked "open burn," he considered might be used for agricultural purposes. There was a man living on a burn east of that, and he had a slashing on this. That is on top of a high hill. When he burned his slashing, it burned the timber and brush, deadened it on that little spot, and that is about all the level land there is on it, and this man made no claim to the railroad land. The land described in his reports of October 6th and 7th, 1907, being in Section 15, Township 5 South, Range 7 West, Yamhill County, Oregon, excepting a 40, is very poor grazing land; just a little grazing there among the timber.

"Q. Now, Mr. Lander, you are a farmer, and have had some knowledge and experience of farming; what do you say as to the ability of a settler, or a man, with or without his family, going on 160 acres of this land that might be utilized for grazing purposes, and fencing this 160 acres and confining his stock and the receipts from the produce of that 160 acres to the 160 acres, being able to make a living?

A. Take land of that class, I remember that section very distinctly—there is very little grazing. He couldn't keep two cows in there in the summer.

Q. Now, from your knowledge of this grant, suppose these lands were cleared for grazing purposes, that

is to say, the lands became logged-off lands, and the stumps and brush were burned over, and a farmer or settler sowed timothy or other native grasses in the stump on the ashes, and in that way got some grass growing, but that he was compelled as a settler to only pasture this 160 acres, and support his cows or his horses, or whatever it may be on there, and attempted to make a living in that way, I will ask you to state whether or not that would be at all possible or practicable?

A. It would not be practicable.

Q. Would it be possible for a man to make a living in that way?

A. No, I don't think so. A very poor living."

Whereupon witness further testified, that the Southeast quarter of the Northeast quarter of Section 27, Township 27 South, Range 7 West, Douglas County, Oregon, examined by him May 24, 1907, and Section 19, Township 27 South, Range 7 West, Douglas County, described by him in his reports when classified as "timber lands" was so classified when all covered with timber. There was scattering oak trees and saplings on Section 27, and that is very poor grazing land. There is a little grazing on it. Section 19, of the same township, is mostly red fir, 30 inches in diameter, and would be merchantable saw-timber. Agricultural lands are such as would be comparatively level, as he classified them, they might be used for agriculture sometime, if it was level, if the timber was cut off. Section 19 is all

rocky and rough land. Speaking generally of the grant, it is very rough and broken, usually rocky in the southern part of the State. It is a kind of clay soil, not very good, in the heavily timbered belts of Douglas and Lane Counties. Whereupon defendants offered in evidence these four documents, as Defendants' Exhibit 350, which was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified herein as such. Whereupon witness further testified that he had never made any cruise for the company. He would sometimes state the approximate amount of timber on a section. He could not say how many reports of the character of Defendants' Exhibit 350, he has made to the company, but has made a good many. He was engaged from time to time in doing this character of work since shortly after the San Francisco fire, but did not work regularly. Sometimes he would work several months and be at some other work. In the summer time he took up the fire work. When he came to Douglas County twenty-five years ago, these unsold timber lands of the company were not worth anything, because there was too much timber on the land. Timber was not worth anything and it cost too much to clear it. He wanted to buy some himself, and he thought he would buy, probably, some agricultural lands himself, and he looked over the county pretty thoroughly, and didn't find any. He did not buy any railroad land from the company, from the fact it would cost too much to clear it. He has been down on the Siuslaw River, in Western Lane

County. Twenty-five years ago these timber lands in the Siuslaw country were not worth anything. He supposes they had a value, referring to the company's lands. These lands included the even sections and were not worth much, very little, because it would cost too much to clear them. Their chief value now is timber, and they are very valuable at the present time, he thinks. The highest price that he knows of any quarter section of timber lands in Douglas County, or in Western Oregon, being sold for is about $5,000 per quarter section. That was along the Coos County line, near the Coos River. He is not now in the employ of the company. Whereupon upon cross examination witness further testified, that he is now sixty-five years old, and was forty years old when he came to Oregon. He formerly lived in Monroe County, along the Delaware River, 90 miles from Philadelphia, before coming to Oregon. He lived near the Blue Mountains, near Delaware Water Gap. When he was a boy, he helped clear up a farm on the hills in Pennsylvania, in which State the land all had to be cleared, as far as he knows. Some of it was mountainous. But the mountains, take the Blue Mountains, those mountains they did not clear; it was rolling land that they cleared. He does not think there are a great many farms in the Alleghany Mountains, in the Western part of Pennsylvania. He has traveled on the Pennsylvania Road, between Harrisburg and Pittsburg, and never noticed from the train, farms along the mountain sides extending up to the top, along that line. There are little places there, but most of the good farms

are along the rivers in Pennsylvania. He was raised along the Blue Mountains, and they are about like the Alleghanies, but a different formation of soil. A good deal of the time since he has lived in Oregon, he has been buying and selling lands, farmed part of the time, but did not farm much for himself. His farm was a mile and a half from Harrisburg, he thinks in Section 14, Township 15 South, Range 4 West, but would not be positive. He took up a homestead, located in Douglas County, located in Section 8, Township 26 South, Range 8 West. His farm near Harrisburg was in the valley, and was prairie land. He owned other lands besides the farm and his homestead, but never farmed them. It is about thirteen or fourteen years since he first went into the employ of the company as Fire Ranger and has been engaged as such practically every summer, although not altogether for the company. He is now employed by the State of Oregon as Supervising Warden, under the State Board of Forestry. He has charge of the Oregon and California Railroad Company fire rangers, under arrangements with that company, and the State Board of Forestry. He does not know what arrangements the Railroad Company has made with the State Board of Forestry, except that he is instructed to assume charge of that work. He receives pay from the State and not from the Railroad Company. The Railroad Company is not in the Fire Patrol Association. The timber companies form the Fire Patrol Association. He ceased to work for the Railroad Company last May (1912) and has not been em-

ployed by it in any capacity since that time. He worked last winter for the company in the land office in getting out records of public land entries that had been made in the local land office. Sometimes he would go in the land office and look up the lands. He is the W. J. Lander that prepared, or assisted in preparing, the plat marked "Township 13 South, Range 7 West," shown on Defendants' Exhibit 264, and he prepared a number of these plats for use in this suit. Other than his duties as Fire Warden, prior to 1911 he was land examiner and would go out and examine and classify lands for the land department of the Oregon and California Railroad Company, under its manager, A. W. Rees. He always got his instructions from A. W. Rees, and did not deal directly with the San Francisco office. His directions were, to go out and examine lands. At the time he made these examinations this suit had not been commenced. They did not send him the applications to purchase at the time he made these examinations, before the suit was commenced. The company would say, that the land had been applied for, or something of that kind, and it would so state in its letter of instructions to him, and that is all the knowledge that he had with reference to that matter. He only acted as Fire Warden in Douglas County. His territory covered all of Douglas County. He had charge for some years of the fire patrol of the railroad company in Douglas County, but never had any patrols in Josephine, Jackson or Lane, or these other counties through which the grant extends. His examinations covered different

counties. His examinations might be in places from the Columbia River to the California line. They might be anywhere, any county where the company had lands. He thinks the company had other men employed in making examinations of lands besides himself. He might examine a piece of land in Jackson County, and the next piece of land might be in Washington County. He examined the land only after the San Francisco fire. He had no authority to approve any applications to purchase, or any leases. He would only send the applications to lease in and report the character of the land and send in the application. The leasing would be done afterwards. He knew nothing about the execution of the leases or the sale of the land. Sometimes in examining these lands he would put a value on them.

Whereupon D. C. McLENNAN, called as a witness on behalf of the defendants, and being duly sworn, testified, that he is of the age of fifty years, resides at Portland, and has resided in Oregon twelve years. His business has been cruising timber and foreman in different logging camps. He has cruised for the Oregon and California Railroad Company, and for different timber companies in Portland. Some of the companies he has cruised for are Finley Morrison & Son, J. D. Lacey & Company, E. W. Barnes and B. Giltner. He first cruised for the Oregon and California Railroad Company about six months in 1902, and his next work for them began December 1, 1909 and he has been with the company continuously since that time, and is now in its employ. He made the reports contained in De-

fendants' Exhibit 261. Whereupon complainant objected to the testimony of this witness, relative to the character of the lands, within the limits of the grants involved in this suit, and settlements thereon and public entries thereof, upon the ground that the same is incompetent, irrelevant and immaterial, and it was agreed that this objection should be considered as made to all of the testimony of this witness upon those subjects.. Whereupon witness further testified, referring to Defendants' Exhibit 261, that he classified this land in a state of nature as "timber land," "grazing land" and "agricultural land"; and when they were denuded of timber, he made two classes, grazing and agricultural. This classification was based upon those reports which he made in the field. He did not prepare Defendants' Exhibit 351, but it was prepared from his reports under the direction of A. W. Rees by some one of the office force. Speaking from memory, he would say that the acreage stated is correct. He did not have anything to do with the preparation of Defendants' Exhibit 342. He did his work in Columbia, Washington, Yamhill, Polk, Benton, Lane, Douglas, Coos and Tillamook Counties. He may have done a little in some of the other counties. He thinks he cruised in Tillamook County, as shown on Defendants' Exhibit 351, something over 10,000 acres, but he does not know about that, he never figured it up. The ordinary course of business in making these cruising reports, was, first, the location of the section, and then they usually would pace off 660 feet, called two tallies. Supposing they had located

the southeast corner of the section, they paced off two tallies west, and then paced right through the section, right straight north, till they got to the north line of the Section. Then they paced four tallies west, and paced through the other line of forties to the south side of the section; and so on through the section. In doing this they made a record, by keeping an account of the number of trees, or the number of feet on each two acres. He kept an account of the number of feet; when he paced a tally he would have two acres cruised. When they got four tallies, that is across a forty, one subdivision, they would have eight acres.

If the timber seemed to be fairly equally distributed over the forty, he would just average it up. When they had gotten eight acres figured up, what was on the eight acres, they would just multiply it by five. That gave them the forty acres; and so on through the section. Sometimes they measured the trees to get an average. This was one of the accepted ways of cruising timber for the purpose of ascertaining the merchantable timber standing on the lands. Where the timber was not equally distributed over the forty, supposing the timber is heavier on one side and lighter on the other, they would examine both sides a little more carefully, to get an idea of the amount of timber to the acre, and by this result one can figure it very closely. He made a memorandum of each tally of the amount of timber, and also noted in this memorandum the character of the soil, topography of the country, and everything relating to the character of the land. Whenever he crossed a stream

he would mark it. He also marked bridges or cliffs, or anything of that kind, so that he would have a fairly good description of the land when he was done. He would take note of the adaptability to agricultural uses, and the character of the soil and whether the land would be suitable for agriculture or grazing. There was no account taken of lands that are unfit for any purpose, but they are classified when denuded as either agricultural or grazing. If he found any land actually unfit for any purpose, it would be classified as grazing land. From his knowledge of the lands which he has cruised, he thinks the proportions as stated are approximately correct, with the exception of the grazing land. There is a lot of that, that is classed as grazing land, that is hardly fit for anything, but there is no provision made in the reports for saying anything about that. He thinks from his actual knowledge of these lands and from his cruising each 40 acres, that this exhibit is a fairly accurate estimate of the percentage that would be agricultural in the present state. As to its being agricultural in the present state, it requires a lot of clearing and such as that. This 30,098 acres, would be without any timber on it. The other is land that has no merchantable timber on it at present, and all that it is good for, is its value as agricultural land. It would be fit for agriculture, and there is no merchantable timber on it. There are stumps and logs and stuff of that kind, which are not valuable for anything. The acreage of agricultural lands from 5,958 acres to 30,098 acres would be increased by clearing. That is, the land is more valu-

able for timber than for agricultural purposes where there is a certain amount of timber and where there is only a small amount of timber it is probably more valuable for agriculture than for the timber that is on it. In a state of nature he found 5,958 acres that was more valuable for its agricultural uses than for any other purpose, but by denuding or clearing a little more he found 30,000 acres, having more or less timber on it, that would be more valuable for agricultural purposes after the timber was off. The 157,941 acres of grazing that would be left after the whole thing was denuded, would include lands that would be timbered and the timber would be cut off, logged off, and would also include any land whether it was rocky or otherwise. This 5,958 acres of so-called agricultural lands in their present condition, was scattered all over the land that he cruised, small pieces in different parts. They would be separated. Whereupon defendants offered in evidence Defendants' Exhibit 351, which was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified herein as such. Whereupon witness further testified, that he had been logging foreman in the east before he came here and had been logging foreman on the Columbia River and also for the Southern Pacific Company at Marcola.

"Q. Now, suppose, Mr. McLennan, that the company had sold these timber-lands, these unsold lands of the Oregon and California Railroad Company, to these so-called actual settlers, at $2.50 an acre, in quantities

not exceeding 160 acres, and had sold them since the timber became valuable, and had given them a good title, what would have become of these lands thus conveyed? What disposition would these actual settlers have made of them?

A. Why, if it was timbered land they bought, they would likely sell the timber; and if it was fit for agriculture, they would probably clear it up and use it as agricultural land, or as grazing land.

Q. Suppose the land had merchantable timber on it, and land should be sold at $2.50 an acre that would cruise and be worth $75 an acre, what would be the experience—what would become of the land? Would it go to timber investors, or would the purchaser live on it?

A. He couldn't live on it—couldn't make a living on it.

Q. Why couldn't he make a living on this for himself and his family?

A. There is nothing on it but timber and brush. He would have to clear the timber off in order to graze stock.

Q. Well, could he clear the timber off it if he went there to make a living?

A. No, he couldn't. No, he couldn't clear the timber off and make a living at the same time.

Q. As a matter of fact, what has become of the

even sections in this timbered country, that have been homesteaded or taken under the timber and stone act, so far as your knowledge is concerned from having gone through these woods?

A. Those homesteads have had a small piece of clearing on them, some half an acre, some three or four acres—very few of them any more than that—and they have been sold to timber companies, and as soon as the people have sold they have left, gone away. They are abandoned, and those clearings are all grown up with brush.

Q. What is the fact, if you know, in these mountains—the Coast Range and the Cascade Range, within the limits of this grant, wherever the land has been settled in this way by homestead claimants, or purchased under the timber and stone act where no settlement was required, as to who owns those lands at the present time?

A. Timber companies.

Q. Did these homestead claimants or homestead entrymen ever make any homes on these lands?

A. Why, they got to stay there as little as possible, but they don't make a living on these homesteads. They go out and work. If they have a family, they leave their family on these homesteads until such time as they get title to them, and then they sell out and leave.

Q. Did you ever know, in all your experience in

these timberlands, of a family living on these homesteads, as a class, continuously, enough to comply technically with the law?

A. After they get their title, they don't live on those lands, without it is some of those claims that are close in to the valley close to the valley, where they could graze stock or use it as agricultural land—but that would be in the edge of the grant. When you get out into the railroad grant, there is very little farm land. All the lands that are fit for agricultural or grazing were taken up or sold, or bought some time ago.

Q. Is it or not a matter of common knowledge, and haven't you observed it all through this grant where you have been, that the even sections where they have been homesteaded have cabins, that were log cabins or built of shakes, shingled with shakes or boarded up, that are in a state of decay, with practically no clearing, where there is no evidence of any human habitation ever having been there except that? Isn't that the history of the homestead entries in Western Oregon?

A. Yes, sir.

Q. Now, suppose that a man pretending to be an actual settler should buy some of these quarter sections at $2.50 an acre, and want to utilize it for grazing purposes, and was required to confine his stock to the 160 acres and to support his stock from that 160 acres, and then support himself and his family from that, what, in your judgment, would be his ability to do that?

A. He couldn't do it.

Q. Then when you speak of these lands as grazing, do you mean to be understood as saying that 160 acres would be sufficient grazing land to support a man and has family?

A. No."

Whereupon witness further testified, that he helped clear 160 acres within the city limits of Portland some time ago, in a tract known as the Vernon tract, about half a mile, a mile or so, from the Willamette River. He had a contract of clearing that of small brush and stumps. There were not very many stumps and no standing timber, just brush and some stumps and a few old logs. It was level land and was not of the class of this land in this grant. He has had no experience or knowledge of clearing timber lands, such as he cruised. He has seen clearings on the road leading up the Necanicum River from Seaside, about fifteen miles, a few clearings on either side of the road. He recalls that stumps are left about 15 or 20 feet high, which at the butt are two or three times the heighth of a man. The method used now in getting this down-timber into a pile to burn is donkey engines to get it together. The big stumps are blasted or burned out with powder, or split up and generally piled together with those donkey engines. Some of these stumps are quite close together, probably 8 or 10 feet apart sometimes, sometimes maybe 4 or 5 rods apart. There is a great deal of stuff in the ground that one cannot see on top. After you take the top of the timber off, there is quite a lot on the ground on those lands that he knows anything about.

These lands he has cruised compare favorably with those along the Necanicum. Some of the lands he cruised are not so heavily timbered. It would cost to get the stumps out, clear the land, and get those stumps off, as high as $200 or $300 an acre to make it fit for plowing.

"Q. Mr. Booth testified that the price would range all the way from $50 to $500 an acre. What is your judgment about that?

A. I should think that would be a pretty fair estimate."

Whereupon witness further testified, that these timber lands of the company that were unsold would be chiefly valuable for timber. The stumpage value of this timber on these lands runs from a dollar to a dollar and a half or two dollars, it depends on the location and the quality of the timber. Whereupon on cross-examination witness further testified, that before coming to Oregon he lived in Minnesota a good part of the time and was engaged in the timber business there, and has been engaged in that business since he was eighteen years old in one capacity or another most of the time, practically all his life. He first started to work for the Railroad Company in 1902, and worked he thinks about six months cruising timber. He then worked for the Southern Pacific Company as logging foreman for about six or eight months in 1906. He started to work the last time in 1909 and has worked for the company continuously since that time, and all this cruising mentioned in these reports here, was done since 1909. He worked for

the company under the directions of A. W. Rees. He sometimes cruised each day 160 acres and sometimes half a section. Some days less than 160 acres, cruising by 40 acre tracts. That is a fair average of cruising by the method used by him.

"Q. Now, Mr. McLennan, can you give me the names of any homesteaders that you know of that have merely settled on timber lands to obtain the title—or descriptions of the land?

A. Beg pardon?

Q. Can you give me the names of any homestead entrymen who have entered homesteads, built a shack, made a small clearing merely for the purpose of acquiring the title to the land in order to sell the timber on it, and not for the purpose of making a home out of it?

A. I don't think I made that statement; but I can show you lots of homesteads, just a small cabin, which has fallen into decay, and a small piece of clearing—some of them haven't got any clearing, and what little clearing there is is grown up to brush. I don't know the people that made the entries—I never looked into it. The people were not there, so I never went into that.

Q. You never examined into the history of the land?

A. They seemed to all have the same history, judging from—

Q. How did you know that that was a cabin that was placed there merely by some homesteader?

A. Because it is on Government land, and there would be no other object in building the cabin and making this small bit of clearing, and then letting it grow up.

Q. Don't you know, Mr. McLennan, as a matter of fact, that any number of cabins have been built in Oregon upon lands that were soon to be opened by survey, merely for the purpose of holding the land in order that scrip might be filed on it by big timber companies?

A. Well, in that case there is no homestead in those hills. They are all alike. I don't know what they have been taken up for, but I haven't seen any man living on a homestead in those mountains.

Q. You don't know what the cabins were built for? You merely have seen the cabins that have been abandoned?

A. Yes, sir.

Q. That is the only thing you base your testimony on?

A. I took it for granted that they were homesteads. In fact, I have been told that they were. But I didn't see the people—the people—were not living there."

Whereupon witness further testified that he never engaged in the examination of the lands for the company, other than this cruising about which he has testified. He has examined trespasses and such as that, in different localities out from Portland, wherever he ran

across a trespass, meaning where timber had been cut off the railroad lands. He has no reference to where someone squatted on the land, but refers to trespass by timber companies, or where farmers were cutting timber for their own use, or anybody for that matter. Whereupon on redirect examination witness further testified that he had a compassman with him when he was cruising these lands.

Whereupon ROY WOODS, called as a witness on behalf of defendants and being duly sworn testified that he is thirty-six years old, resides at Newburg, Oregon, and at the present time is in the fire patrol with the State. He had been a compassman at various times for the Oregon and California Railroad Company since 1902. He has been over the lands of the company as a compassman, some in Columbia, Josephine and Coos Counties, and very little in Douglas County. He was compassman for Charles Cavell and D. C. McLennan, who has just testified. He was not with him as compassman during the time he made all of his cruises but was compassman for McLennan in December 1909 up to March 1 1910. His first year out as compassman for Covell was in Josephine County, some in Douglas and Coos Counties but he is not certain as to Jackson County. He was with him as compassman something like probably about five months. He did not work with him in Multnomah, Washington, Linn, Lane or Clackamas Counties. He has had experience as a compassman with other cruisers for other people. He was out with the Moylans who were cruising he thinks for the

Booth-Kelly Lumber Company in January 1903. He has not worked for the Oregon and California Railroad Company since June, 1912. During the work that he did last for the company, he was looking over some of its lands and out with a photographer. He was looking out for people who had attempted to settle or locate on some of these lands to see the character of the lands where it was improved where it was inhabited and what was its general character. These lands were in Columbia and Washington Counties, some in Jackson and Josephine Counties. The lands he then examined, upon which parties had attempted to trespass or settle, were mostly timber lands. He was present and examined the timber lands in Columbia County where a lot of photographs were taken by Gifford and C. W. Kempton.

Whereupon referring to "Defendants' Exhibit 269" witness recognized photographs Nos. 2942 and 2943 and testified that he was present and saw these two photographs taken. Besides himself, Kempton was close at hand when they were taken and he thinks L. D. McLeod was on the ground at the time. He had occasion to run these lands out in 1910 when he was there and also had occasion to run these lands out this winter and is pretty well acquainted with that section, having been to most every corner in that township and that is the way he ascertained where the camera was placed. The top of the picture was taken from the place indicated in the blue print attached to the photograph. The three corners indicated are all perfect. The land in the prospect shown in the photograph is heavy timber

mostly and the land on the ridge is timber. In the immediate foreground of both of these photographs, the timber has been burned. Prior to that time it had been heavy timber. He would say that this land is on a straight line about 10 miles from the Columbia River and Houlton was the closest railroad station on the main line of the S. P. & S. Railroad Co. formerly the Northern Pacific. He was with Gifford at the time of taking another photograph, "Defendants' Exhibit 269." This photograph shows the character of the improvements made on these three quarters in section 8 same township. On one piece of land there had been a house at one time, but it had burned down. This land was, or had been government land at one time. These improvements were abandoned. They were all on even sections, at one time government land. From the lands he had covered and been over in person, the lands of the Oregon and California Railroad Company that he had visited, are a good deal more valuable for the timber than for anything else. He would think that the amount of timber on a forty necessary to make it of commercial value as timber land, would be a good deal owing to the character of the land, whether it is standing on end or could be cultivated after cleared. He does not know how much timber there would have to be on a forty to make it valuable to sell as timber land. He is not a timber man in that sense and does not know how much some of these forties run in board feet. He has had no experience in clearing this land. He has never taken a homestead himslf, and has no knowldge of abandoned homestead claims in timber

regions. On the even sections in this grant he has seen a good many of them that were apparently settled and abandoned. Some of these entrymen were living close to where their homesteads were, some of them he does not know where they are. In a great many cases titles to these lands have passed to timber corporations. In most cases where he was able to find the improvements there was a pile of rocks and a few scattering shacks all dilapidated. Some places there would be a board house probably with a little patch around it, a few berry vines or something where they had grown up all over the place, with windows and doors all out. There was no evidence of continuous settlement any more than just what is required to become in possession of the land. He has been in Columbia County and the homesteads on the ground that he went over were practically all abandoned, whereupon complainant objected to all the testimony of this witness relating to the character of the land within the limits of these grants, settlements thereon and public ruling thereon as incompetent, irrelevant and immaterial and it was agreed that the same objection should be considered as taken to all the testimony of the witness upon these subjects.

Whereupon witness further testified as follows:

Q. Well, now, what would you say as to the ability of a man to go onto one of these 160-acre timber quarters as an actual settler, to make a living for himself and family on the land?

A. It would be impossible.

Q. Why?

A. Well, there is nothing there to make a living from. There is no ground that you could derive anything from whatever.

Q. Couldn't he get out there and grub these big trees up, and cut the timber down, and sell it for cordwood, and sell it to these timber people, and in that way make a home for himself and his family?

A. Well, he might if he lived to be a thousand years old—he might get a patch big enough to support himself and family.

Q. Then, if I understand you, you would regard it as practically impossible for a man to go on these premises as a settler?

A. I do.

Q. And make a living for himself and family?

A. I do.

Q. Well, what is the fact as to whether he could not buy this land from the company, supposing the company was willing to sell it, at $2.50 an acre, and go out there and fence it, and make a living off it by raising cattle and pasturing it, or raising stock of some kind, using it as grazing land?

A. What do you mean—on this 160 acres?

Q. Yes, just 160 acres. What is your answer to that?

A. No, I don't think he could, no, sir.

Q. Well, now, suppose the company had sold all of these timber-lands to these so-called actual settlers, of which there are some several thousand actual or potential settlers shown in this record, at $2.50 an acre, in quantities not exceeding 160 acres, and had given the so-called actual settlers a good title, what would have become of these lands?

A. Well, practically in about the same condition they are today. What was handy to a mill would be logged off, and the balance would be in the hands of some timber corporation, standing just as it was.

Q. Then these so-called settlers would have to sell them, or would sell them?

A. Yes.

Q. Is that right?

A. Why, that would be the only thing they could do. That would be the main object in taking them, I should imagine.

Q. Would they be able to sell them at an advance of $2.50 an acre under the present market conditions?

A. They certainly would.

Q. Some of these timber-lands in Columbia County that you saw there, what would they be worth for 160 acres at the present market conditions?

A. Present market value?

Q. Yes.

Mr. Rabb: Objected to on the ground that the

witness has not shown himself competent to express an opinion relative to the market value of timber-land, as he is shown only to have been a compassman.

Q. You may answer.

A. Those claims in there went from twelve to fourteen—there is one young man, I think, in there has a claim in section 22, the northeast quarter of 22, if I remember the description right, has a standing offer of sixteen thousand or eighten thousand—I forget now which it was, with a lumber company there, I was informed.

Q. Sixteen or eighteen thousand dollars?

A. I wouldn't say for certain which it was at that time, but I was informed.

Q. Is that the fair market value of these lands?

Mr. Rabb: I move to strike the answer of the witness from the record as hearsay.

Q. Is that the fair market value of these quarter sections?

A. That is what they were sold for, I understood him.

Whereupon witness testified that he is not in the employ of the Company; that he discontinued his employment June 5, 1912, and is now in the employ of F. A. Elliott, State Forester, as supervising fire warden for Multnomah County. He has knowledge of what little timber lands there are in Multnomah County, but does not know where the unsold lands of the Company are

situated. There is a small strip of timber lands in Multnomah County situated on the extreme west line of the northwest corner and the extreme northeast; that is up the Columbia River from Eagle Creek south. There is no timber above Eagle Creek; there is also timber east of Latourell or Bridal Veil country. The timber in that section is fir and larch and is of average quality. It is merchantable timber.

Whereupon upon cross examination witness testified that he now resides at Newberg, Yamhill County. He is under F. A. Elliott, who is State Forester, formerly an employe of the Oregon and California Railroad Company. Since he was twenty-one years of age he has followed stationary engineering for saw mills, flour mills, brick yards, ice plants and worked at various times since 1902 for the Oregon and California Railroad Company, and his acquaintance with these lands is such as he gained while in its employ. He had the names of parties that had taken these homesteads that he mentioned as abandoned but can only recall one or two. One was Julius Floeter, who was in the southwest quarter of section 4 North 3 West, and a man by the name of Anderson on the northeast quarter of section 8, same township, and a man by the name of Wilson on the southeast quarter same township and section. These cabins were all near the section lines between the even and odd sections, within the limits of the grant, but he does not know whether these cabins were intended to be placed on the railroad lands. The entry calls for the ground the cabins are situated on. The names and descriptions

of the land were taken off the government records. He supposes they were handed to him by someone in the office of the Railroad Company at the time he went out to make the examination of these lands from January up to June 1, 1912.

Whereupon C. M. STITES, called as a witness on behalf of defendants and being duly sworn, testified that he is fifty-four years old and lives in Washington County, Oregon, and is a farmer. He has lived in Oregon since 1882, moving to Williams Creek, Josephine County, in 1883. He lived on a farm there until 1886 or 1887. He was assessor for Josephine County in the years 1895 and 1896 and always made his home called Williams Creek until 1907, when he moved to Washington County, where he is now living. His first experience in the sawmill business was in California. He worked there the season of 1897 and next at Merlin in 1898 for the Sugar Pine Door & Lumber Company and worked for that company every season except 1895 and 1896. He thinks he quit that Company in 1900 and in 1901 worked awhile for the Booth-Kelly Lumber Company at Coburg, starting in as a common laborer and finishing as foreman of the mill at Coburg, which mill had a capacity at that time of about 70,000 feet for 10 hours. His first experience in cruising timber lands in Oregon was when he commenced in 1897 when employed by the Sugar Pine Door and Lumber Company. He was superintendent of their mill or mills and cruised and then sawed out. In 1904 he began cruising for any person who wanted the work done and had worked for

a great many different people. This cruising for the Sugar Pine Door and Lumber Company done by him was in the vicinity of Merlin and Wolf Creek in Josephine County. He never cruised any for the Oregon and California Railroad Company but cruised Josephine County for the County of Josephine and made two trips as a cruiser to Eastern Oregon for the California & Oregon Land & Live Stock Company. He is familiar with the lands of the Oregon and California Railroad Company in townships 32 to 41 south inclusive, ranges 5, 6, 7, 8 and 9 west. Commencing with 32, which is in Douglas County, Oregon, and along in the northern boundary of 33 south, which is the boundary line between Josephine and Douglas, the water-shed is the boundary line between these two counties. Township 41 south is bordering the State line between Oregon and California. The actual cruising was done on surveyed land. He did not cruise any unsurveyed lands which would be in the north part of the county, Range 7 and 8 west is the boundary of the surveyed lands, and in the southern part of Josephine County there are some surveyed lands as far west as range 9. He has been in 39 and 40 south, ranges 2, 3 and 4 in Jackson County, on the head waters of the Little Applegate and partly on the head waters of the main Applegate, southwest of Jacksonville. He was never in the Jenny Creek country in the eastern part of Jackson county, but has been across the mountains and in Klamath Falls and through that country, but did no cruising in that part. He has also been on a trip of reconnaissance to Fort Klamath and north of

Fort Klamath, but did no cruising in that part of the country. He cruised all of the surveyed land of Josephine County for the County while he was assessor, but cruised no unsurveyed lands. His cruise included the unsold lands of the Oregon and California Railroad Company. He has cruised in 32-7 and 32-8 in Douglas County for himself and individuals. That would be in the south boundary of the county and in the country drained by the west and middle forks of Cow Creek. He has not done any cruising in the western part of Douglas County. He made a trip to Coquille and down through that country, cruised some in there, probably a section or something of that kind. As far as he saw, he became familiar with the general character of the timber in the western part of Douglas County but of course was not noticing that particularly. He has been in a part of what he supposes is Coos County, but does not know,—in the Coast Mountains within the 30 mile limits of this grant. He has been in Lane County. He made a trip up the middle fork of the Willamette River and across the range. He has made that trip some three or four times, first in 1893 on a pleasure trip. Then in going to Eastern Oregon he made two trips across there and immediately after he had been over the mountains he began cruising but did no cruising west of the summit of the Cascade Mountains. He saw all the timber that was in sight of the road, that is all, and the general character of the country of course. He has not been in the western part of Lane County and had no opportunity to see the timber lands of the Company and

others in Linn, Marion or Clackamas Counties, although he had been through Clackamas some but paid no attention to the timber. He has not been in Benton, Linn, Yamhill, Washington, Columbia or Tillamook or through the timber lands of Tillamook County. He is more especially familiar and has directly cruised all of the lands in Josephine County and does not think there is more than 1½ or 2 per cent of these unsold lands of the Oregon and California Railroad Company, with which he is familiar, that are suitable for settlement or agricultural or horticultural or other such purposes. His judgment is based on his farming experience and the observation of the experiments that have been tried by others on these lands and from farming operations and fruit raising operations that he conducted himself and saw others conduct there and is also based upon his actual knowledge in going over these timber lands that he has cruised. He was acting for Josephine County when he cruised these lands and has never been employed by the Oregon and California Railroad Company, to do any cruising of any of its lands. Of the lands that he cruised in Douglas County there is none that are suitable for agricultural purposes. The chief value of these unsold lands of the Company in Josephine and Douglas Counties and other sections with which he is familiar is the timber. In Josephine County the lands are very mountainous and what is really unsold contains very little pasturage, or would contain very little under any conditions. The pasturage in the higher mountains would amount to considerable, and

does under natural conditions, from about the first of June until November first. To give a good idea of how much pasturage is furnished, he would say that township 39 south, ranges 5 and 6 west, and township 40 south, 5 and 6 west, furnish pasture in the summer, and the maximum pasture has been furnished there for 1,000 to 1,100 head of stock which have absolutely eaten all the pasture in these four townships in that time, besides this stock was pastured outside of this area to some extent, referring by stock, to cattle mostly. That area would be something over 80,000 acres necessary to feed 1,000 to 1,100 head of cattle during that period. The foothills around the valley, in his judgment would raise good grapes, that is quite a per cent of it, probably 50 per cent of the percent he has named. Possibly once in awhile a place would raise peaches or pears and it is his judgment that is the extent of what the land would do. There has not been enough of these lands utilized to amount to a percent. There is one demonstration that proves that grapes can be grown commercially on such lands. He does not remember what section but it must be in township 37 south range 5 west, probably a mile from the Applegate River on a farm owned by H. Carson, who has he thinks 60 acres in grapes now. It is hill land. The expense of clearing this land and putting it to any such use as that would vary with the conditions and would run from $30 to $40 an acre up to $100 or $150 per acre, something like that. There is a limited area of that character of land in Josephine County. Land that is covered with saw or commercial timber would cost to

clear it and make it available for plowing, if there was soil, from $50 to $200 an acre, some places as high as $300 per acre. The soil of these lands in most of the eastern part of Josephine County is granite soil, decomposed granite. In township 35, 6 and 7; 36, 5 and 6, there is quite a lot of flat and small hill lands of decomposed granite mostly underlaid with beds of gravel, especially in 36—6. There never has been any profitable farming done on any of that land. Granite is a stone and this is just simply decomposed by the action of the weather. This township 36—6 he speaks of, the flat land is to the southwest from Grants Pass and is underlaid with a deep bed of gravel, he does not think any one knows how deep it is. It is gravel the size of a fist and down, so that the water leaches right through the ground and takes all the substance out of it. If it were irrigated it would possibly be suitable for cultivation, but it does not hold the fertilizer or moisture. It would not be at all practicable to irrigate these hill lands—it would be out of the question to do that. The supply of irrigating water from the gravity system is all taken and taken again. Probably streams that have one thousand inches have claims for three or four thousand inches. The talk of irrigating these lands is idle because there is not the water. He does not think there is any possibility of the lands which he cruised in Douglas County being utilized for any agricultural or horticultural purposes.

Whereupon witness further testified as follows:

Q. Now, suppose, Mr. Stites, that an actual settler, so-called, should apply to the company to purchase 160

acres of these lands that you speak of, at $2.50 an acre, and should be expected to go out there and settle on these lands, enclose his quarter section, and make his living for himself and his family on this quarter section, and confining his stock range to that quarter section, or his agricultural or horticultural productions to that quarter section, what, in your judgment, would be his ability to succeed or to utilize that quarter section for settlement purposes?

A. Well, the unsold lands are none of them that I would consider a man would be justified in undertaking such a thing.

Q. Suppose a man went out on a quarter section that had commercial timber on it, ranging in value according to the stumpage from $5,000 to $10,000 per quarter section, and the company, under pretense of his being an actual settler and applicant under this act of April 10, 1869, should sell him this quarter section, and he should go out there with his family, or alone, build him a shack for a home, undertake to live there, make a home out of it, and to make a living, what use would he put that land to, do you know?

A. That would depend in a great measure on how far he was from transportation where his land was located, and all those kind of things.

Q. Well, what would be the best use that he could put that land to, if it was heavily timbered?

A. The best thing he could do with it would be to sell the timber off the land, in my opinion.

Q. Suppose these timber lands of the company were all sold to so-called actual settlers, a good title given them, in quantities not exceeding 160 acres, at a price not exceeding $2.50 an acre, and they got a good title, were not required under the Act to live there any length of time, but just to settle, how long would it be, in your judgment, and from your knowledge of the way these timber lands have been taken and disposed of, until these actual settlers had disposed of all these timber lands for their market value?

A. Well, I would suppose that they would sell at the first opportunity.

Q. What is your knowledge, if you have any, as to what has become of the lands in the even sections, title to which has been taken from the United States, where they are covered with timber?

A. I am not informed as to what has become of the homestead entries. A great many of the timber claims have been sold—practically the majority of them.

Q. To whom have they been sold?

A. I don't know. Well, I believe that one group on the head of Williams Creek was sold to a man by the name of Olsen.

Q. What class of investors have secured the title to these lands, if you know?

A. I did not understand.

Q. What class of investors have purchased these lands?

A. Well, there has been some bought by mill owners, but mostly by timber speculators, I suppose. I am not very well informed on who has acquired the title.

Q. In your travels through these lands in Josephine County and in Douglas County, did you notice anything in the way of settlement on these even sections? What evidence of homestead settlements, if any, did you notice, and what has become of the improvements?

Mr. Rabb: Objected to as incompetent, irrelevant and immaterial.

A. The homestead improvements that I recall are mostly in 39—6. There were six homesteads there, which ground, I think I cruised in 1906. At that time the cabins were new, practically new. I seen no one at any of the cabins, but in most instances there was a little piece of ground spaded up, and some garden planted.

Q. What kind of cabins were they as to material?

A. They were built of split cedar.

Q. How large?

A. Oh, I should say 14 or 16 feet square.

Q. One or two stories?

A. One story high.

Q. Any fences?

A. I do not recall any fences.

Q. Any stock?

A. No stock.

Q. Any human beings?

A. No, sir.

Q. Any evidence of anybody living there?

A. None at all. Any more than this, there were outfits for camping and cooking in most of the cabins.

Q. What kind of timber was it where these settlements were?

A. These cabins mostly were built right along the flat of the stream, and the timber right in the bed of the stream was Port Orford cedar mostly. The hillsides were very steep, probably an angle of forty-five degrees, something like that, covered with fir timber, most of it.

Q. Good fir timber?

A. Not very, no.

Q. What was the chief value of these claims that you saw, these homesteads?

A. If they had any value, it was for timber.

Whereupon on cross examination witness further testified that he has been largely engaged in sawmilling since coming to Oregon. He has farmed on Williams Creek in Josephine County, where he owned 100 acres of land and his father owned 180 acres and they farmed together when he farmed. After he went to work for wages his father and the family lived on the farm. His farm is in section 34, township 38 south, range 5 west of Willamette Meridian. He has never filed on a home-

stead. He cruised all of the lands in Josephine County that he thought was worth cruising. This cruising was not done while he was assessor of Josephine County, but was done in 1905 and 1906 and part of 1907 after he had been assessor in 1895 and 1896. He did not cruise any solid townships in Dougslas County, but cruised around in two or three townships, 32-7, 32-8 and reconnoitered west of there but did not do any cruising. His only knowledge relating to the lands in Lane County is practically confined to a trip taken along the public highway concerning which he has testified. He has cruised a little land on the McKenzie, probably ten or twelve forties, something like that but does not claim any particular knowledge only as to the general lay of the country. He got his information about the homestead improvements in 39-16 from blue prints of the government plats which he always carried with him when he went to cruise the land. He does not know whether these entries have been abandoned or not. He knows that the alleged homestead settler hired these cabins built and he talked with the man that built the cabins. There were a number of them built by the same party, but he does not remember the man's name—the man he met while he was cruising below there. Individual locators or entrymen hired this man to build their homes; that is one man built them all, but the individual man hired this man as he understood it. He does not know whether this same man got the homesteads after the deal was perfected, but he does not imagine that he did, because he did not seem to him to have enough money to buy

anything—he did not buy them. This man was working for himself and lived there close to the claims, down the hill from them, and it would be naturally easier for him to build these cabins than anybody in the country. There were no people living in that township, only one man. The other man lived below in the next township. He thinks there was one man but he does not remember his name. Possibly his name is Barnett, he thinks it was, who lives in section 31 of that township. If he remembers rightly Barnett contested with the Railroad Company for title to his land and he was living on railroad land. If a man lives in a cabin he is supposed to have a bed and some furniture. In these cabins there was simply a frying pan or two and a place to lay down some blankets, something of that kind. There was no furniture of any kind. Possibly a block of wood set on end. This was in 1906. He does not remember or recall the names of any of these homesteaders.

Whereupon on redirect examination witness further testified that he had never been in the employ of the Oregon and California Railroad Company or the Southern Pacific Company.

Whereupon C. W. KEMPTON called as a witness on behalf of defendants and being duly sworn testified that he is thirty-six years old and is at present employed as inspector of sewers in the City Engineers' office, of Portland Oregon and has been in Oregon a little over two years and was employed as land examiner and taking pictures of lands by the Oregon and Cali-

fornia Railroad Company from January 1, 1911, until along in July 1912. He went out on some lands and took pictures on the Santiam River. He was through Polk and Lane Counties. A portion of the time he was by himself, but a majority of the time, Roy Woods, Kinser and Elliott, the State Fire Warden's son were with him. Witness took the photographs "Defendants' Exhibit 273" and made notes on the back of them, not being absolutely familiar with the different sections of the country he was in, knowing only just simply from examination and finding the quarter corners and by direction of streams that flow in regard to the maps that he carried to show his location. He made the notes on the back of the photographs after they were taken; that is, he would make notes at the time on each film, when he was taking all these, and afterwards would transfer them from that notation to the photograph. These notes accurately record what he noted at the time he was on the ground and they are correct. There is a photograph here showing the south half of the southeast quarter, and the south half of the southwest quarter, section 18, township 7 south, range 6 west, and the photograph was taken showing the improvements on the place April 2, 1912. The claim was a homestead of Alfred Haldeman. All that he has taken were homestead claims. The improvements were badly decayed; the buildings were put up out of shakes. The memorandum shows the size of the buildings that were on the land, the measurements show the size of the house that was built. The house was 12x12 and the barn 12x14

and were not occupied. There was no sign of occupation around them. To all of which testimony of this witness complainant objected as incompetent, irrelevant and immaterial and it was urged that this objection should be considered as taken to all the testimony of this witness as to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof.

Whereupon witness further testified that the cabin shown in the photograph taken at this time was built on the bank of the creek and is in a canyon on the bank of a small creek. The timber on the claim was good fir timber and the land was chiefly valuable for timber; it was very rough. The next photograph shown him was taken on the head of what is known as the Rickreall River in Polk County and he knows that very well. The memorandum was a report that this was the homestead of John F. Johnson on the south half of the northeast quarter and the north half of the southeast quarter of section 2, township 8 south, range 8 west, and he got a portion of this data on the memorandum as to when the filing was made and patent issued from the Oregon and California Railroad Company at the time he went out to work and he got the date of the transfer of the title from the records in the Recorder's Office at Dallas. This notation shows the present owner; that is who owned the property at the time, and is what he secured in the office. The improvements on this land were badly in decay, broken down by a tree falling across the corner of the house, not occupied, and no farther improve-

ments on the land or ground at this place.

Whereupon it was agreed that this witness would testify that the memorandum on each of these photographs is a correct statement of what his testimony would be and the same was received as his testimony, subject to the objection made. It was further agreed that the witness would testify that he obtained the information as to when the land was filed on, when patented, from the land office of the company when he started out and obtained the date when sold and the consideration for such sale from the records of the Recorder's office in the various counties in which the lands were situated.

Whereupon witness further testified that he did not examine the County records as to all of these photographs. Those that are in Polk County where they are shown on the back, he has examined them. There may be other notations on some of those others where he did not go to the records in the county. Polk County he went there himself. He went through this county by himself and secured this data and made all the notations or memoranda that were made by him under the circumstances as he has stated he believes. He can tell by looking at the back of them whether or not he did so. He took these photographs according to the dates as placed in the memorandum on the back of the picture. Some few of these photographs are not homesteads. He was engaged in taking these photographs "Defendants' Exhibit 273" from about the 20th of Jan-

uary up to July, 1912, but was not out continuously. The lands shown in these photographs are situated in Polk, Lane, Clackamas and he believes there are one or two in Marion County. These reports or memoranda made on the back of these photographs show the descriptions and the memoranda as to conditions of improvements and occupation and so on are according to the facts as he found them on the ground. These lands shown in these photographs are chiefly valuable for the timber. He found very few of these improvements occupied, he thinks there is but one picture where there was any one occupying the improvements. These improvements were badly in decay and broken down. Occasionally there was an old wagon road going by these improvements, but mostly trails. There was no evidence of recent occupation on these lands, with the exception of one where there was an occupant. One place was occupied, they had been in there about two years and they had not at that time received their patent. The man was a homesteader and had a wife and children with him. The nearest town to which this was would be Mahama on the Santiam River in Marion County, about 12 miles away. He had a cabin and he saw him there in May, and all he knows as to whether he and his family had lived there continuously was the statement of the man that he had been there that time, and that he had been there since he built his cabin. He had about a quarter of an acre cleared. It was too early in the season for him to start the crops, excepting a small garden which they had started and making his

clearing there. His cabin had two rooms and with that exception he found no settlements or occupants on any of these claims.

Whereupon defendants reoffered each and all of these photographs marked "Defendants' Exhibit 273" being about 80 photographs in all and all of which are enclosed in an envelope marked on the outside "Defendants' Exhibit 273," which were received in evidence and are hereinafter set out and described and made a part of this Statement of the Evidence and identified herein as such.

Whereupon witness recognized "Defendants' Exhibit 273-a" as that showing the improvements on south half of northeast quarter, west half of southeast quarter of section 24, township 10 south, range 2 east, where he found this man and his family who had been there for some time as the man said. With that exception he found no evidence of occupation, no persons living on these premises shown in these photographs.

Whereupon said photograph so recognized was marked "Defendants' Exhibit 273-a."

Whereupon on cross examination witness testified that these notations on the back of these photographs were made in his presence, he dictated the memoranda from the notes that he made at the time he was on the ground on the films; he had a note book that he kept notes in and he used an Alvesta panoramic camera and these pictures were all taken while he was in the employ of the Company. He was employed by the railroad com-

pany from January until July, 1912.

Whereupon on redirect examination witness further testified that these memoranda on the back of these photographs are accurate from the memoranda made in his book at the time each day. He dictated these at the time they were copied on the photographs taken from his memoranda. The Oregon and California Railroad Company's land office furnished him the data of when these homesteads were entered and patented. It was the Portland office in charge of A. W. Rees that furnished this information. Some of these photographs had been enlarged, but were all taken with the same camera. The data as to when sold and the consideration, for what sold, where it appears on the back of these photographs was obtained by him in person from the Recorder's Office at Dallas. He would go to the volume that contained the record of the deed and take the date of deed and the consideration stated and verify the description of the land to see that it was the same land that was given as a homestead. He ran it down from the legal descriptions.

Whereupon witness testified as follows:

"Q. Did you pay any attention to see to whom these lands were conveyed, and what class of people were buying them? Whether they were timber companies or what?

A. Gone into the hands of timber companies."

Whereupon upon re-cross examination witness testified that he had charge of the party with whom he was,

when these pictures were taken. His instructions were, to go through and examine these lands and photograph whatever he found, they giving him the homestead locations and the descriptions of the homesteads. In taking photographs it is necessary to have weather conditions suitable for that purpose. These photographs are all of lands in range 5, 6 and 7 west and without referring to his notes he could not just recall what townships they were in but the lands were scattered over the strip and in ranges 5, 6 and 7 west but he could not recall without referring to his notes. He did not take a photograph of all the lands that had been entered from the government by homestead entries in these townships, weather conditions did not always permit and they did not return for that purpose. There were a few people living in these townships who had patented homesteads from the government other than he had shown. His only knowledge of these lands was such as he obtained on this trip. He was in Polk County something like three months.

Whereupon on re-direct examination witness further testified that very few of these homestead claims that he did not photograph were occupied. There was very little occupation. The condtiion of these that were not occupied, as to improvements where he did not take the photographs, was about the same as the photographs displayed. He was engaged in this business from January until July, something like six months, but not continuously, as weather conditions were such that at times it was not justifiable to put out any films. He would

say there would not be two per cent of the homesteads that he saw in all that time in all that country that had any settler actually living on them. The even sections were all taken with the exception of about, if he remembers correctly something like 840 acres in Polk County that was not taken of government lands. These lands that were homesteaded were very rough and rocky and they were chiefly valuable for timber, if they had any value. All of these photographs taken showed lands within the limits of the grant. A couple of these photographs were taken on an odd section but this is shown on the back of the photograph, with that exception they were all taken on the even sections, within the limits of the grant.

Whereupon **ALICK WILKINSON** called as a witness on behalf of defendants and being duly sworn testified that he is forty-two years old and resides at Gresham, Oregon, and has lived in Oregon over 8 years and has been in the business of lumbering or acted as compassman with cruiser McLennan. McLennan cruised in township 3 north, range 3 west and the southern part of 4 north range 3 west; township 19 south, range 4 west and part of township 3, range 5 west; township 21 south ranges 7 and 8 west; township 22 south, ranges 4, 5, 6, 7 and 8 west and he was with him during the time he cruised these lands as compassman. All of these townships are rough. To which complainant objected as incompetent, immaterial and irrelevant and it was agreed between the parties that this same objection should be considered as made to all the testimony of

this witness regarding the character of the lands within the limits of these grants and settlements thereon and public entries thereof.

Whereupon witness further testified that to the best of his judgment about five per cent of these lands would be suitable for agricultural, horticultural or some settlement purposes. These lands are chiefly valuable for timber. He has had no experience in cruising lands other than as a compassman for a cruising party. He has worked in the timber business ever since he was fifteen years old and has been doing everything—foreman in logging camps, all kinds of work, everything in logging camps and did work in a sawmill a little. He is not familiar with the character of these lands outside of the particular lands that he was over with McLennan, which had on them fir, cedar and hemlock, which were in Douglas and Lane Counties. He was also with McLennan when he cruised the 840 acres in one body in Washington County and 1340 acres in another body, part of it in that county, but could not say how many acres in that county. He served with him as compassman while McLennan was cruising them. He was with McLennan when he was cruising in Lane County in three townships. He was with McLennan in Douglas County from about the 4th or 5th of March up to the date he testified in October, 1912. The work that he did with McLennan was in Lane, Douglas and Washington Counties. He is still in the employ of the Oregon and California Railroad Company as compassman and commenced work this time for that company February 1,

1912. In the spring of 1910, he was out with them 27 days in Washington County. To make a quarter section of timber land commercial would depend upon where it is located and how close it is to transportation. Some would be worth more than others. Some that is way back is not worth so much, others close in are worth quite a little. A 40 that is only a million feet board measure is marketable, it all depends upon the quality and location and accessibility and distance from transportation.

Whereupon upon cross examination witness testified that he had been working in the timber as his occupation all of his life since he was fifteen years old, worked in Northern Wisconsin; came to Oregon in the spring of 1894 and did everything in logging camps; has been sawing in this country. Northern Wisconsin was a timber country.

Whereupon **BEN IRWIN**, called as a witness on behalf of defendants and being duly sworn, testified that he is an abstracter, residing at Portland, Oregon, and was employed by the Oregon and California Railroad Company from 1905 to 1910, chiefly abstracting and in some cases making examinations of land. He has been in portions of the grant in nearly all of its extent, making examinations. In Columbia County he has examined pretty closely. He has made examinations in Multnomah, Clackamas, Linn, Lane, Douglas, Josephine and Jackson. The most careful examinations were in connection with getting information relative to settlers or

trespassers on the company's lands in Columbia and Multnomah Counties. He searched for the location of certain lands claimed to have been settled upon by certain applicants for the purchase of these lands under the $2.50 per acre clause, and particularly lands thus applied for by persons represented by A. W. Lafferty in this litigation referred to in this record. He was on the work of finding their depredations and operations on the company's lands. These photographs, Defendants' Exhibit 270, containing a typewritten memorandum pinned to each thereof, signed "Ben Irwin," which memoranda thus signed are numbered 1, 3, 2, 16, N, 23, 24, 20, 19, 5 and 8, and unsigned numbers 26, 29, 27, 31, 30, 34 and 33, being in all eighteen photographs, were made under his direction in the field, in connection with A. W. Rees. He and Rees located all of these photographs—all of these cabins and views.

Whereupon defendants offered in evidence said Defendants' Exhibit 270 with the memoranda attached, to which complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that the same objection should be considered as taken to all evidence of the witness relating to the character of the lands within the limits of the grants involved in this suit, settlement thereon and public land entries thereof.

Whereupon said Defendants' Exhibit 270 with said memoranda having been heretofore offered and received in evidence, are here reoffered and herein made a part of this Statement of the Evidence, identified as such.

Whereupon witness testified that he ascertained the descriptions and location of these lands upon which these cabins shown in the pictures, are located, by finding the section corners or quarter section corners, and pacing the lands in connection with his work as compassman for Rees, the cruiser and field agent of the company. These memoranda attached to each photograph were prepared by witness, in his report furnished to the company shortly after the examinations were made, and correctly represent the descriptions and dates, both signed and unsigned, as they were found by him at the time in the field. These photographs are of cabins and depredations upon land on the summit of the mountains between the Columbia and Nehalem Rivers, in Columbia County. The lands were very rough as a general thing, and steep, and the altitude was high. There was very heavy timber on nearly all of these lands. Fir was the predominating tree. He went into these cabins and in most instances there were a few dishes and frying pans, bedding, and in a few instances the parties or persons were near there trespassing upon the premises. In most cases there was no one present. In most instances the cabins were not occupied, but in a few instances they were occupied.

Whereupon complainant objected to said last mentioned testimony as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as made to all other testimony of this witness relating to the settlements, conditions and improvements made by set-

tlers on the lands within the limits of these grants.

Whereupon witness testified that these photographs were taken about the date stated in the memoranda by Fred H. McClure, mostly in the presence of witness. Some of these cabins were constructed of logs, and some logs and shakes. The shakes were split pieces of cedar. The cabins were roofed over with shakes. This material for these cabins apparently was obtained in all cases from the lands contiguous thereto. These lands upon which these improvements or cabins are located, as shown in these photographs, were chiefly valuable for their timber. In going to these cabins they traveled from Houlton to a point in the vicinity of the lands and occupied unused houses in section 8, township 4 north, range 3 west. There were many unused and abandoned houses, but they stayed at a house which had been used at intervals by the owner.

Q. Well, were those cabins of the same general character as these shown in the photographs, where you say they were abandoned?

A. There are not many cabins in there. They are about of that character.

Q. Well, were those on the even sections?

A. They were, yes, sir.

Whereupon witness testified that in township 4 north, range 3 west, from the best information he was able to gather, and he endeavored to find it, there was not a single permanent resident at that time. They

had abandoned their places, such as they were, and removed. He was present when other photographs were taken that have been introduced in evidence, and participated in taking the remainder of the photographs in Defendants' Exhibit 270 to the extent of locating them and directing the photographer, as described in the memoranda attached to the photographs. Photographs Nos. 96 and 88, looking northwest, are upon lands that did not belong to the company. They were in Columbia County, about three miles south of the lands upon which the trespassers were found, and represent abandoned cabins of former residents.

Q. Do you know whether these were homestead claimants or not, as shown in 96 or 88?

A. I do not know whether they were homestead claimants or not. My information in the locality was that they had formerly lived there.

Q. How long did it appear that those cabins had been abandoned?

A. About four or five years.

Whereupon witness testified that it is his recollection that they made several trips, and that the dates shown on the memoranda and photographs are very nearly correct, except that the 1907 dates are undoubtedly erroneous, that is, May and February, 1907, should be 1908. The first trip that he made was in December 1907. These photographs which he has identified were taken by Fred H. McClure, called as a witness in this

case. Witness and Rees found the corners and paced out the distance and located the exact points where the cabins were found. He has had some experience in ascertaining corners and lines of lands in this country. For four years he located lands at intervals, and the work required him to find the corners. These descriptions on these various photographs are all correct, excepting in a few instances the trespassers had erroneously placed their cabins upon lands other than they had intended, that is, some of the cabins were located off of the line of the lands applied for. He found a great many notices of these so-called applicants, or so-called settlers, in nearly all cases, he believes, usually posted on the cabin or on trees near by. The notice belonging to No. 45, appears to the left of the door, about three feet from the bottom, and was nailed to a log. The notice for No. 41 appears in the photograph nailed upon the door. In all cases these notices had some name signed thereto. These cabins appear to have been constructed within a few months or less time, with reference to the time these photographs were taken, and were constructed from timber cut and trees destroyed upon the land, and were built of logs and shakes. A shake is a split piece of cedar. The predominating and controling tree of these forests shown in the photographs is Douglas fir. Nearly all of these lands upon which these cabins are located, and in all the contiguous territory around the same, were very rough, and all were chiefly valuable for timber, and nearly all of these claims were heavily timbered, and would run, as esti-

mated or measured by a cruiser, from five million to fifteen million feet per quarter section. It was the best timber to be found. There were some roads to go to these cabins, but the great majority of them were at some distance from roads. He was required to travel either over very poor trails or through the untrodden forest. A wagon could not be gotten to more than one cabin in five. There were no school houses or churches near these lands. He was present at the time other photographs were taken of the grant lands. He took a few photographs in Douglas County, west of Drain. These taken by him were taken after all of the other photographs shown in Defendants' Exhibits 273, 267, 268 and 269 taken by other persons. He has taken views of other parts of the grant, but not for this purpose. These photographs taken by him near Drain were taken for the company, and showed the character of the lands to be very rough. He had to do with taking some photographs in the vicinity of Larch Mountain, east of Portland, near Bridal Veil and Bull Run and that section, but was not present with Homer D. Angell when the photographs containing his signature to the memoranda were taken. Larch Mountain country is in Multnomah County. The character of the lands up there where these photographs were taken is very rough and rugged and heavily timbered. The land is chiefly valuable for timber. He has only been a compassman in other parts of the grant for Rees. When Rees was cruising he was with him every moment. He was cruising or looking at the character of the lands

on only isolated portions of the lands when he was acting as compassman, except in Lane County, which includes a number of the parcels shown in these photographs. The lands shown in 20 south 1 west are in Lane County. These lands described on the bottom of these photographs are situated in Lane County, on a tributary of the middle fork of the Willamette River, southeast of Eugene. These lands are very rough, mountainous and timbered. Measured by what he has observed while he was carrying and compassing for the cruiser, and while he was going through other portions of the grant, he would say that very little of that land could be cultivated without clearing at an expense greater than the land would be worth after being cleared. He has knowledge from investigation or personal experience as to the probable cost of clearing these timbered lands, where there was any soil that could be utilized after it was cleared. He has cleared a few acres himself and under his direction, and his information is that it would cost from $100 to $200 an acre to clear heavily timbered, or even lightly timbered land, and that cost would depend upon the extent, number and size of the stumps. There is a large amount of land in the southern part of the grant which is useless for any purpose except raising timber, on account largely of the climate, and the great majority of the land in the grant is not suitable for anything except timber. The soil of the land in the southern part of the grant is rocky, the land mountainous, and climate requires irrigation. The soil is not fit for anything—rocky soil that will not

grow anything. He has been over the lands of the company in Jackson and Josephine Counties to a considerable extent, and has been practically in all parts of the grant except Benton, Washington, Tillamook and Lincoln counties. He uses his independent judgment with reference to the character of these lands. He is not now in the employ of the company.

Whereupon witness produced certain photographs, which he says he took in other portions of the grant than those indicated. Whereupon the same were marked Defendants' Exhibit 313, and the witness testified that these photographs were taken in Douglas County and purport to show locations within the limits of the unsold lands of the company involved in this suit, and these lands are in section 27, township 22 south, range 6 west, and the photographs were taken March 9th or 10th, 1909, by him, and correctly represent what they purport to show.

Whereupon defendants offered these photographs, so marked, in evidence, and the said Defendants' Exhibit 313 was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified as such.

Whereupon witness testified that the lands where these photographs were taken, were heavily timbered and chiefly valuable for timber. The lands were very rough in most instances. The cabins were not occupied. They appeared to have been abandoned a few months. The cabins were constructed from material

made from trees cut upon the land, and were built from shakes and logs, and had been built within a few months. From his experience and observation, the stand of timber per quarter section, would be about six million feet, and that would be, relatively speaking, medium heavy. Douglas fir was the predominating tree. He knows how to measure or estimate the number of board feet and has done some of it.

Whereupon witness, upon cross examination, testified that prior to his employment by the company, his occupation was that of a stenographer principally. He has worked at other occupations, clerking in stores, farming, etc., farmed in northern Nebraska, a prairie, open country, left the farm in Nebraska when he was about twenty years old, and is now employed as an abstracter in the City of Portland for himself. He has not been employed by the Oregon and California Railroad Company or Southern Pacific Company since 1910. These examinations made by him of the lands involved in this suit, were made while he was an employe of the Oregon and California Railroad Company. The office in San Francisco designated some of the lands he was to examine, and some of them were designated by Angell & Fisher, and he obtained his instructions principally from Angell & Fisher. The last examination made by him, he believes, was made under the direction of the California office, receiving instructions from General Land Agent B. A. McAllaster. The instructions were sent jointly to Rees and himself. He found the persons referred to by him as trespassers

upon the lands that he knew belonged to the company. He knew the company owned, or claimed to own the land. He has had two or three years experience in the timber, while he was in the employ of the company, and that is the only experience in the timber he ever had. He cruised timber in Clackamas County and assisted in cruising timber as compassman in Multnomah, Columbia, Lane, Polk, Josephine, Jackson and Douglas Counties, between 1907 and 1910, inclusive. The earlier cruise was in connection with land that had been contracted to be sold by the company and had reverted. He does not think, take it all in all, that the greater part of his examinations of the land had been made with reference to lands that these men had squatted on in the grant. These particular examinations were made after the suit had been filed by Lafferty in behalf of these parties. He made a good many examinations prior to 1908 in different parts of the grant, but referring to the lands especially in Columbia County, in 20 south, 1 west, that he had mentioned as having been settled upon by trespassers, they were all examined in 1908 and subsequently after suit had been filed by some of the parties at least to obtain title to the land.

Whereupon FREDERICK A. KRIBS, called as a witness on behalf of defendants and being duly sworn, testified that he is fifty-two years old, is a land dealer by occupation and resides at Portland, Oregon, and has resided there since February, 1902. Prior to that time his home was in Minnesota. He has been engaged in the timber business, buying and selling timber lands, making

investments or handling timber lands, about twenty-seven or twenty-eight years, and his experience in that line has been principally in Minnesota and in the Coast States of Idaho, Washington, Oregon and California. He is acquainted with the unsold lands of the Oregon and California Railroad Company, inuring to that Company under the Act of Congress of July 25, 1866, and May 4, 1870, involved in this suit. He is more familiar with the lands in Coos and Douglas Counties and some few lands in Curry County, and is familiar in a general way in Linn and Lane Counties. He is not very familiar personally in Washington County, although he has had men out examining lands in certain parts of this County. He has been out in Eastern Multnomah County, over in the Bull Run District, up towards the Mt. Hood country. He has ridden and driven through that part of the country a great deal. The character of these lands is principally mountainous. To which complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of these lands within the limits of these grants, the settlements or possibility of settlements thereon and public entries thereof.

Whereupon witness further testified that these lands in Multnomah County are valuable for timber. He has made no personal examination of the timber lands of the Company in Yamhill County. He has driven through the country a great many times, but has been only on the farming lands in Yamhill County. The unsold land of

the Company in Clackamas County is all timber and mountainous country. He has made two trips into that country. Generally speaking the character of these lands is mountainous and timbered, and some are burned over lands. At the present time these burned over lands would not have much of any value. They are too remote. He presumes they could be used in the summer time for a short period for grazing land, or something like that. In the mountainous country, stock is generaly put in, in the months of May, June, July and August. Snow or heavy stormy weather in the higher altitudes generally keeps them from going in earlier. About that time of the year, they drive their stock in. Right back of Falls City in Polk County, the lands are mountainous and timbered and he would regard the value of these lands as pretty nearly wholly for their timber. The Abiqua and Molalla are rivers heading up in the mountains, especially the Abiqua. Abiqua basin is extra heavy timber and he is familiar with that particular vicinity. The other range of mountains, through there, he would assume is timbered the same in like way. He is not familiar with the lands situated on the Santiam River adjoining Lane County, near Mehama in Marion County. He has not been in that section. He would say that the value of this unsold timber land in Marion County is chiefly for the standing timber. He has no actual personal knowledge of Alsea Bay, which is outside of the grant, but has been all over the country west of the Alsea Basin and knows it is a timbered country from hearsay. His holdings in Lincoln County lie west of the Company's

lands. He has made no examination in Benton County. Thomas Creek, Santiam River, Calapooia and other streams, heading in the Cascade Mountains, which run west to the Willamette River, are all high in the mountains and the country as a whole is what is called a mountainous or timbered country and these lands of the Company situated in Linn County, are chiefly valuable for the timber. In a general way, he has knowledge of the timber lands of the Company in Lane County, as he owns a good deal, a good many of the even sections. It is all high and mountainous country and principally valuable for its timber. He thinks the Railroad Company had lands in 15 south 2 and 3 east, 14 south 2 east and 15 south 1 and 2 west, and that his Company acquired a good deal of lands over in that country. The timber lands in Lane County as compared with other sections of the State are very heavy timber lands, excepting the old burns. The country is rough and mountainous and as a whole he would say, would be at this time, wholly valuable for its standing timber. These old burns are pretty much the same all through the mountains. The green timber has been killed and old stubs standing, or the timber has fallen upon the ground and there is generally a thick growth of brush. It is commonly reputed that these fires have been caused from fires that have gotten loose from time to time, from careless hunters or campers, though a good many burns were known to exist in places before some of the old time settlers came there over fifty years ago. These burned over lands in some places would have a very fair soil. In other places

they would be rocky and poor and not of much value. Where the good timber is, through the Cascades, he would say the elevation would go from 1200 up to 2500 feet. Vegetation on these burns would be mostly different kinds of brush. In places, there is found pea vine, and in real open spots with not too much brush, little tufts of grass here and there and different kinds of brush, hazel brush, salal and vine maple. There is not very much of anything that could be done to use these burnt over lands at this time that would bring much of anything in the way of income or money. There are some spots where there might be here and there a little feed, now and then a creek coming through and the country being open, there might be a little grass, but one would have to have quite an area of that country, if he were going to make a stock range or stock proposition out of it.

Whereupon witness testified as follows:

Q. Suppose that a so-called actual settler should apply to purchase 160 acres from the company at $2.50 an acre, and the company should sell it to him in good faith, for the purpose of allowing him to make settlement on it, giving him a good title, and he was expected to go upon the land with his family, and fence it, and devote it to any useful purpose, such as grazing or agriculture, and make his living, confining his pasturage to that quarter section, what, in your judgment, would be his ability to make a living on any of these quarter sections in that way?

A. Well, over these mountains, on account of the

bad weather and conditions generally speaking, I do not think he could make a living. I do not think he would stay there.

Q. Suppose that the company had adopted the policy of selling all of these lands, timbered and otherwise, to actual settlers, in quantities not exceeding 160 acres, at a price not exceeding $2.50 an acre, and had conveyed to these so-called actual settlers these timber-lands with the understanding and expectation that they would go out on these timber-lands, attempt to make settlement, make a living, make a home, what use would these actual settlers make of these lands and what would become of the title?

A. Well, they would hold it until there was a good——

A. They would hold it according to their means, until there was a good market, and they would sell the timber to some lumberman or speculator, and it would all be owned by lumber companies now, or the most of it.

Q. What would be his ability, or what would be the possibility of a man being able to make a living as a settler on one of these quarter sections of timber-land?

A. Well, he might make some kind of a living, but it would be a very poor one, if he confined it strictly to one of these quarter sections high up in the mountains.

Q. Are these lands or not fit for actual settlement?

A. I would not say they were fit for settlement.

Whereupon witness testified that he is pretty familiar with all the timber lands in all parts of Douglas County, odd and even sections. He is familiar with some lands, knows more about them than he does others, but in a general way he is familiar with nearly all of the lands that are colored on that map, "Defendants' Exhibit 259." There might be some to the extreme east side that he does not know much about, on account of their location being so far up streams, but generally speaking the greater part of these lands are valuable for standing timber and in many townships he has made personal examinations and estimates. The character of the timber in Douglas County on these lands, is fir, and in the higher mountains principally old yellow fir; in the lower altitudes, red fir with now and then a little cedar and other kinds of timber but it is principally fir timber. The topography of the country where these timber lands are situated, are rough and mountainous and the elevation runs from 1200 to 3000 feet but through the upper Umpqua he would think about 2200 feet would strike a general average. He thinks the lands owned by the Railroad Company in Coos County would be the lands that would be up on the Coquille waters. He has selected a large part of his Company's lands on the head waters of the Coquille and these remaining lands he presumes are the ones that were not purchased. They are heavily timbered lands as a whole and their chief value is timber. He is acquainted with the timber lands of the Railroad Company in Curry County. In Curry County, these lands are in Townships 34 and 35 south, ranges

11 and 12 and township 31 ranges 12 and 13. 31-12 would be in Coos County, 31-13 mostly in Curry County. They are principally heavily timbered lands. Township 35, ranges 11 and 12 must be these green lands shown on the map. They are on the Rogue River and there are a few lands that he cannot personally tell about. The topography of the country, of these lands in Curry County, is mountainous. He is acquainted in a few places in Josephine County but has not an active personal knowledge, as he has never done much work personally in that country. He has had men in different parts of the country and along back from the roads and mountains generally, a rough mountainous country, and the lands where there is timber, are valuable for timber. In other places, there would be old burns or openings. He has gone through there in a general way, but has not done a great deal of work in that country. The character of the topography is mountainous. There are some places where the soil would be fair in Josephine County in these timbered areas. Other places quite a bit of rock and more like a mining country. Up the Rogue River in Jackson County there is land known as the Hopkins tract on Jenny Creek, he thinks that would be in the south side of the county. There is a tract known as the Goodfellow tract on the Upper Rogue on the east side which is fine sugar and yellow pine and the odd sections in through that end of the country are also fine timber, and the land is chiefly valuable for timber. He has not been personally in the western part of Jackson County on the Applegate Creek. He had

a man or two in there. Lands that are not covered with timber in Jackson County, but which are covered with chaparral, manzanita and other such like small growth, would have to be used for grazing land, something like that. The topography of these lands, both timber and otherwise, is all high elevation, mountainous. A man could have a tract of that and use it for summer grazing for cattle and sheep and so on. If a man was in the stock business for a living, and had 3000 or 4000 sheep, he ought to have about 14000 or 15000 acres of land, to graze them on. He does not know what the Forest Service figures this pasturage at, per acre, of these burned over and timber lands to sheep men or other stock men per annum, but he rents land east of the mountains in the same localities and gets seven and a half cents an acre for them. They are able to graze these lands generally from April to in September. A man could not make a living at a rental of seven and a half cents an acre for 160 acres of this grazing land. It would not amount to anything. He spoke of some lands known as the Jenny Creek country but he could not say from memory whether that is located just in Jackson or Klamath County. It is a very high grade timber on that stream. Jenny Creek as shown on this map is in Jackson County. Most of these lands to which he refers are in Klamath and part in Jackson Counties. That is fine timber, some of the best in the State. These timber lands in Klamath County are chiefly valuable for the standing timber. He is not very much acquainted with the unsold lands of the company in Columbia Coun-

ty. He has been along some of the roads but has never been interested in the timber there. He has had men out in Tillamook County but has not been there personally. He optioned and spent a lot of money in examining two different tracts of land in Tillamook County. It was very heavy timber land but he did not buy it. These lands that he optioned would be in the edge of the grant, just outside the indemnity limits of the grant of July 25, 1866, and within the limits of the grant of May 4, 1870. These lands that he had under investigation were heavy timber, very rough and mountainous. He has no knowledge of the unsold lands of the company in Washington County. He is acquainted with the holdings of the Simpson Lumber Company to an extent, in Coos and Douglas Counties and is acquainted with the timber holdings of the C. A. Smith Lumber Company in Coos and Douglas Counties and has been over a great many of these lands personally and he thinks he is able to judge the timber character of a 40 when he sees it. There are two ways of ascertaining the timber stand on a given forty, with a view of buying or selling and that is what they call "double running." The land is all run out in its legal subdivisions by use of the compass and is checked up on the different points to see that it is correct, then they make a tree count, or if the timber is standing pretty evenly all over the forty, measure half acres or acres here and there, strike a general average of what it is thought it will average per acre, right through and then multiply by the number of acres of timber, and have a

scale measure on the stump and do the figuring from the scale. The location of the unsold timber lands in this grant in western Oregon and the even sections owned by different people are considered good and the timber belt is considered about the largest in the United States. The predominating commercial tree in that territory, is Douglas Fir, which ranks as a tree that will make very good lumber. It is secondary in value to high grade pine but is considered very fine lumber. Referring to "Defendants' Exhibit 315" witness says that he has been pretty much through all that country where these pictures were taken. He could not identify from the picture, the identical 40 acres of land that any particular picture was made from, but knows these pictures were all taken down in Mr. Smith's timber and he knows the man who took the pictures. He has two or three of these himself and these pictures fairly and correctly represent what they purport to show. Relatively speaking the timber lands of Coos County is a larger belt than in other localities and it is heavy in point of stumpage. It will average all about as well in quality.

Q. What is the highest price for which a quarter section of a large holding of timber-lands has been sold within your knowledge and experience in this part of the State of Oregon, western Oregon, for instance?

"A. Where I am posted, the last two or three years, there were quarter sections sold from $4,000 up to $12,000 per quarter. But before that it was some cheaper, as there was not a great deal of opposition in picking up timber then."

Whereupon witness testified they are asking for timber lands in the locality near Timber in Washington County in the Nehalem and Tillamook, since the railroad went in, from $2.00 to $3.00 per thousand for their stumpage, and there are quarter sections there that will go from ten million as high as twenty to twenty-one million to the quarter section. Some of these quarter sections could not probably be bought short of $60,000.

"Q. Well, then, if an actual settler under this law should apply to the company to buy one of these quarter sections at $2.50 an acre, of which there are some 7,000 intervening in this case, actual or potential so-called settlers, his quarter section would cost him $400. Would he or not be able to sell one of these quarter sections for the prices that you have named?

A. He would get a good fat price as soon as he would get his title."

Whereupon witness testified that he had no connection with the Oregon and California Railroad Company or the Southern Pacific Company in business or otherwise and his business is that of dealing in timber lands principally.

Whereupon on cross examination witness testified that he had been engaged in the timber business practically all of his business life, twenty-five to twenty-seven years and since coming to Oregon he has been engaged in the timber business as a timber broker and an investor. He did a great deal of cruising the first two and a half years he was here in Oregon. The first two years, he

would have so many varying reports as to what there would be on a quarter section of timber, that he put in a hard week's cruising here, on some of these lands to find out who was right and who was wrong according to his judgment. He started out in the timber business and cruised for a great many years and that is all he did as a starter for many years. Since coming to Oregon, as a whole, he has cruised comparatively little. That cruising was in most all parts. He had generally made it a point, and would today, of going into a brand new territory, to go out and check up lands here and there and find out for his own satisfaction about how he thought it would average per acre, or how the tract would go. He depended largely upon reports of cruisers that he had tried out and tested. He does not personally go over everything in great detail as to lands that he purchases or invests in or sells or buys for other people. His knowledge concerning the lands included in this grant in Multnomah County result from his having driven through Multnomah County and he has been out over the timber belts and could observe them as he was driving through them. He was simply driving along the public highways and has been off on some of the smaller roads. He has been offered trades for property in town, personal or real, for lands alleged to be timber. In some instances they were and in some they were not; he went out to look up some of that himself. He does not know that he can give the location by township and range, without looking it up, but some was out in what they call Sandy River waters, and one piece out

near Cherryville, this side of Estacada. He has not made any extensive personal examination of the lands in Multnomah County. In Clackamas County he made a run in through some timber some years ago and then put men in there and he checked up some of their work. Take the county as a whole he has inspected a very small portion of the lands in that county. He has been out on one or two of the streams and ranged around through there and saw that it was a heavily timbered country where he was. It would not be a very large area of what he would call any detailed cruise but he got over quite a bit of the country, ranging through it on roads and trails to get general ideas of the country. He was in what they call the Abiqua Basin country. There is a smaller stream coming in through there, either the Clackamas or Molalla waters. He has had men in two or three different locations up in the mountains of this county looking up timber but has not been personally in any other portions than he has mentioned. As to Marion County his information is directly from men he sent there and is not personal knowledge. In Linn County he has been pretty much in Township 12, ranges 1, 2, 3 and 4; township 13 south, ranges 1, 2, 3 and 4; township 14 south, ranges 1, 2, 3 and 4; township 15 south, range 3 east; township 15 south, ranges 1 and 2 west, upon the Santiam and Rock Creek waters through there. In Lane County, he made one trip up the east or coast fork of the Willamette and was over on the Mohawk waters and was up above Wendling on that little railroad and back into the timber there.

A few miles in Jackson County, he looked into a lot of scattered lands that were offered to him east of Medford and then he was up in the Jenny Creek country looking over what is called the Hopkins tract and then up the Rogue River and looked into what is called the Goodfellow tract. All together he should think he ran over in a general way 140,000 to 150,000 acres. He went all through the different sections and examined now and then, a forty here and there, to verify other people's work. He made quite a general inspection in Josephine County about 10 or 11 years ago, and concluded not to invest and so his personal work has mostly been in the counties on this map—Douglas, Coos and Curry Counties—referring to "Defendants' Exhibit 312." In Josephine County he made one trip quite a number of years ago but cannot name the creek now. It was no main river. He went up two different creeks and went into a very high rough country, saw a good deal of timber, but a man would have to have a very large area in order to have a large amount of stumpage in that particular part where he was. He could not give the township and range of the general locality. That was 11 years ago. In Douglas County he has been pretty much over all the lands owned by the C. A. Smith Company, also by the Pillsbury, Kribs Company, and what is known as the Shook lands, and several other tracts. He has been pretty much over the timber belt all over Douglas County on the Smith and Umpqua Rivers and its branches and on that part of the Coos River that heads into Douglas County. A large part

of the lands he has mentioned, would be located in township 27, ranges 7 and 8, township 23, ranges 4, 5 and 6; townships 27 and 28, ranges 8 and 9; townships 24, 25, 26, 27, 28, 29, 30 and 31, ranges 9 and 10; townships 26, 27, 28, 29, 30, 31 and north part of 32, range 10. In fact he has tripped that whole country pretty nearly through to the ocean. In Coos County he thinks he has been in the part of range 9 which is partly in Douglas County; that would be townships 26, 27, 28, 29, 30 and 31, range 9; then in township 25, range 10; townships 25, 26, 27, 28, 29, 30, 31 and 32, range 11, townships 27, 28, 29, 30, 31 and 32, range 12. Range 13 is partly in Coos and partly in Curry County. He has been pretty much in nearly everything that was bought there one time or another. He has been around through these lands. He only knows the railroad lands in Lincoln County from hearsay. His lands are farther to the west along the coast.

"Q. Now, you spoke of leasing land for seven and a half cents an acre for grazing purposes. You get other consideration in addition to that, do you not, in the way of fire protection and removing of underbrush, removing the fire risk?

A. Well, the contracts claim that they will keep a watch out for fire, but there is no brush clearing, or anything like that.

Q. Naturally stock running through the timber would naturally remove a great deal of inflammable material, would it not?

A. Well, if you put in a band of goats, they would eat quite a lot of stuff. I don't know as sheep do very much but eat the grass."

Whereupon witness testified, that in taking the elevations in the Coast Range they used the barometer nearly all together, and he took the elevations in many places. As to elevations, he testifies in some cases from general knowledge and in other cases he took the elevations himself. They required, that their cruisers should take the elevations everywhere in the mountains and as to a great many elevations he is depending upon the reports received from the cruisers. His interest in lands in Oregon are principally with the corporation, in the stocks, etc., so that they own their stock together. He does own some personally but could not tell exactly without looking it up, several thousand acres. He is interested in probably somewhere about 100,000 acres all over the State of Oregon and has a substantial interest in these lands which are all valuable. He has been dealing almost all together in timber lands. In making purchases of lands, he looks after their timber value. In the last few years he has had also a soil examination made, but only in the last three or four years. He purchased principally for timber. Logging conditions and the stand of timber would outweigh any of the soil possibilities in his estimation. He knows about where the lands were, where these photographs shown in the magazine were taken, as shown in "Defendants' Exhibit 315" but not exactly, the exact spot. He was not there when the photographs were taken, but knows when the work

was going on and he helped arrange and lay out the work. He really has no personal knowledge that these are photographs of lands in Curry County and he did not assist in doing the work but sent men to help them. He knows they performed the work to his satisfaction.

Whereupon upon redirect examination witness testified that he did not recognize the photographs shown at page 49 of "Defendants' Exhibit 315" as that of any particular timber that he knows, but he can take one into a great many places of timber that Smith owns and he owns and get just as good a picture as that. The photograph is a fairly good reproduction of the scenes of forests on some of these lands of the C. A. Smith Timber Company. He cannot tell where the picture shown on page 51 of "Defendants' Exhibit 315" was taken but knows of several stands that would make a picture as good as that. He has seen timber of that kind in Curry County. The picture shown at page 53 of "Defendants' Exhibit 315" would be one of these mountains or ridges of timber taken from a high open spot. He has seen timber stands of spruce such as shown at page 55 of "Defendants' Exhibit 315." The tree shown at page 65 called "Second growth" is a young er tree than the old growth. He always figures that the same kind of a tree, but the second growth is a young tree. He has seen stands of second growth timber on this land of the C. A. Smith Timber Company in Coos County, such as shown in that photograph. The view shown at page 67 of "Defendants' Exhibit 315" is a fairly good mountain view of the location of the timber

holdings of C. A. Smith Timber Company in Coos County near Marshfield. He has been all down through that country in that section where that is shown. The view shown at pages 68 and 69 with the very high mountain in the distance, looks like it might be a scene taken from Johnson Mountain looking towards the south fork of the Coquille and the headwaters of the Sixes River, and that mountain looks something like Johnson Mountain. One can find in various locations trees like that shown at page 77 of "Defendants' Exhibit 315." They are very large and nice trees. Trees could be found like that on the C. A. Smith Timber Company's lands and on other lands and on the lands of the Oregon and California Railroad Company. There is such timber as is shown on page 79 of this exhibit on the head of the Sixes. Port Orford cedar is what is called white cedar. It is of the cedar family. The bark looks about the same as the red cedar tree. The wood is white and has a very strong odor and is used mostly for finishing and sometimes in boat building. It is practically all situated in Coos and Curry Counties with a little in Douglas County and he has never heard of it being anywhere else in the world excepting in this section. He can find spots in this heavy timber on the lands of the C. A. Smith Timber Company in Coos County that one can get a picture like that shown on page 99 of this exhibit. The capacity of the C. A. Smith Timber Company's mill at Marshfield, he thinks now would be about 600,000 feet per day and it is about the most modern mill of which he knows. The C. A. Smith Timber Com-

pany ships at the present time by vessels to California where that company has a distributing point. The transportation obtained for all of the timber on the Coast Mountains or streams leading into the Pacific Ocean is principally by the steamers, in some instances by logging railroads. The Portland mills secure their logs largely by hauling them into the Columbia River and its tributaries or by having a logging railroad from the timber to the Columbia River and then towing their logs to the Portland market. The Portland mills get their lumber to market by water and by rail. The cut or manufacture of the mills in the City of Portland is about 600,000,000 feet per year ordinarily and he thinks probably 50,000,000 to 75,000,000 of that goes out by water and the rest by rail. Of that he is not sure, he has heard the relative amounts but cannot remember. The railroads carrying lumber from Portland are the Southern Pacific Company, the Northern Pacific and what is now called the North Bank, Great Northern, or Spokane, Portland and Seattle Railway Company. The railroad to Puget Sound from Portland would be the Northern Pacific and the Oregon-Washington Railroad & Navigation Company. He does not know if that is the Southern Pacific or who owns that now, that is the Oregon-Washington Railroad & Navigation Company. The Chicago, Milwaukee and Puget Sound Railroad runs to the Sound but he does not know whether it has connections at Portland or not. The general character of Western Washington as to lumber manufacture and timber is a rolling country and these logs are either

gotten out by the streams or by railroads and the lumber marketed by rail and by steamer. The country is principally all timber. He thinks there is more lumber manufactured in Washington, taking the small mills out on the roads, than in Oregon, but the two States manufacture much more than any other state. He was subpoenaed to be a witness here and he has an interest in a small tract of these Oregon and California grant lands purchased from Acting Land Agent Andrews several years ago and he bought some tracts that were assigned to him by other people and he would say that he is interested in about 4,000 or 5,000 acres situated in Coos County and he thinks they are involved in one of these forty-five suits brought by the United States. The Pillsbury Lumber Company is the defendant in the suit involving the lands in which he is interested, referring to the so-called Innocent Purchaser Suits in which the United States is plaintiff. The Smith-Powers Logging Company does the logging for the C. A. Smith Lumber & Manufacturing Company. He supposes that the picture shown at pages 84 and 85 of "Defendants' Exhibit 315" is that of the mill plant of the C. A. Smith Lumber & Manufacturing Company at Marshfield and it is a fairly good picture. He has been there and recognizes it as such. He has seen such boards manufactured by mills in Oregon, as is shown at pages 84 and 85 of "Defendants' Exhibit 315" and this is not an imaginary picture scene. He has seen the lumber yard or unite yard of the larger Marshfield mill of the C. A. Smith Lumber & Manufacturing Company shown in the pic-

ture at pages 94 and 95 of "Defendants' Exhibit 315" as it is moving its lumber more or less all the time. This is a picture of the lumber yard and he believes it to be a picture of Smith's yards. Marshfield is on Coos Bay.

Whereupon on re-cross examination witness testified as follows:

Q. Mr. Kribs, you do not want to convey the impression in the record here that the photographs of this timber that is referred to in Defendants' Exhibit 315 is a fair showing as to the stand of timber on the O. and C. lands, do you?

A. I have not said that.

Q. You do not want to convey that impression?

A. You can go on the O. and C.—you see those pictures there, Mr. Smith would have a great many lands in places well timbered, where he could not go and get probably as nice a picture as some of those. He pictured nice places here in a good body of timber. Now, you can go on the O. and C. and pick out lands, and you will get nice pictures like that.

Q. What was the purpose of that publication, Mr. Kribs, Defendants' Exhibit 315? I understand from your testimony that that was prepared partly under your supervision.

A. These photographs, I picked out men who were familiar with all the roads and trails, and knew all that part of the country, in good shape, and had them go out with the photographers who came out from Chicago, and did not know anything about timbered lands or

woodcraft at all. Had reports to get very nice pictures and how the work was going on, although I was not there myself personally.

Q. This is what you might term a booster issue of the publication that it purports to be?

A. It was really, you might call, an advertisement, gotten up by the American Lumberman at Chicago, and they probably worked the deal up for Mr. Smith, as he was starting out in this country, a good advertisement to show up his plant, timber, and general resources, make him better acquainted, and be a good thing for him, and they got him into it.

Q. Those photographs in that magazine show what might be termed the best stands of timber in Coos County, don't they?

A. Well, I don't know as you would say it was the best, but they would pick out in a good body of virgin timber, and then get pictures that would make nice pictures—get good pictures they took for the advertising.

Q. This stand of timber, you do not attempt to say it extends over this grant, such a stand as is shown in the photographs here?

A. No, there are some photographs there would not be any stand like that in the world, even—redwood.

Q. Some of the finest timber in the world, then, is shown in those photographs?

A. Some of the nicest places they could find, of course, which would be a higher average than a whole

large body of timber; but Mr. Smith's lands have been very carefully selected, and are generally all pretty heavy right straight through.

Q. Those photographs are not taken within the limits of this grant, are they?

A. There would be some of those pictures that were taken over in the Coquille country that would be right in where the company has got quite a large acreage, as I recollect.

Q. Coquille is not within ten miles of the limits of the grant, I believe, is it?

A. I should think it would be farther away than that.

A. There are places where I think some of those pictures were taken, up in the Eagle Mountain country, up in 31-10, some in 31 and 32-11. I think they were up there, and the Railroad Company have a large area in there.

Q. Do you know, as a matter of fact, where those photographs were taken?

A. Well, I had reports from one of the men that they were going up to take some pictures up on Eden Mountain, they were going to Cold Creek, which would bring them in 32-11. Then they swung around, and took some up the Coos River, some east of Marshfield, down near the Beaver Slough country, and then whenever these camps were located, which would probably be a little east from Marshfield, they took pictures gener-

ally all over the whole tract. That was the idea.

Q. You only know that from reports?

A. The orders were given to get pictures everywhere through the whole tract.

Q. I say your testimony as to that is based solely upon the orders that you gave, and the reports that you received?

A. Yes.

Q. Coos County contains about the heaviest stand of timber in the timbered belt there of any county in the state, does it?

A. No, I don't know as I would say that. It is about as heavy, will average about as heavy right straight through, take the main large body. But we have other locations in the state that will average up very heavy indeed.

Q. This locality where these photographs were taken is unusually heavily timbered?

A. Yes, that is extra nice timber.

Whereupon witness testified that he is agent for one of the C. A. Smith corporations known as the Linn & Lane Timber Company, which has very large timber holdings in Linn and Lane Counties. He is worth and owns property of more than several hundred thousand dollars and would say that he has spent about twelve years of good hard cruising, had a pre-emption claim, familiar with that class of people and saw them all through the wooded country and had about as little to

eat as the rest of them had and he has a pretty good idea what a fellow can do in these wooded countries and if one would put it away back in the mountains he can make it a good deal stronger. All of the lands in which he is interested are generally remotely located. They have at this time a speculative value and he could not give the true value of the same. He could not do it very well. It would be all guess work but he would consider himself to be worth several hundred thousand dollars.

Whereupon on re-direct examination witness further testified he began life as a hard working boy and knows what the needs and wants of the poor man are.

Whereupon W. R. WHIPPLE, called as a witness on behalf of defendants, and being first sworn, testified, that he is sixty-seven years old and resides at Grants Pass, Oregon, and has resided in Josephine County for about fourteen years, about that time at Grants Pass and the balance of the time in the southwest portion of the county. His business during that time has been surveying and civil engineering. He has been deputy County Surveyor, and deputy United States Mineral Surveyor for four years, and has also done some work in that county in the location of timber lands, or timber claims and is familiar with the unsold lands of the company in Josephine County. He has been over most of the grant in the near vicinity. The grant is mostly mountainous in Josephine County. He has surveyed land, run ditch lines and done mineral surveying in general when he went over the lands. In performing that work he became acquainted with and has knowledge of the charac-

ter of the lands in that county. It is mostly hilly ground. To which testimony the complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified that they are hilly, and the soil is generally poor, mostly too broken to be cultivated; in fact, there is very little that could be cultivated. Probably about fifteen per cent of these lands in Josephine County are covered with timber of a merchantable character. He is making a rough estimate from his knowledge of the country. The balance of most of the land has been burned over. There has been timber on it sometimes, it is generally brushy and rocky, but part of it along the Rogue River district is decomposed granite, and it has very steep hills. He does not consider any of these burned over or decomposed granite lands as fit for any kind of cultivation, unless there may be some very small tracts. There would probably be ten per cent of the unsold lands of the company in Josephine County that would be covered with chaparral and manzanita. He would not consider that character of land of any value, except there might be some near a town where a person might possibly make a home and a living out of some other business. It is close to Grants Pass and a man might use it for a site to put a house on, but he would have to do something else to make a living, besides agricultural pursuits. There is very little

of this land close to Grants Pass that a man could live on. The land that is rocky, is unfit for cultivation. All of the ground that is really fit for cultivation, has been settled years ago. It had been sold in the early days and bought from the railroad company and occupied by small settlers, and then a great portion of the land was settled before the railroad land grant, under the Donation Land law and under other laws. He is familiar with the boundary line between Josephine and Jackson Counties and recognizes Defendants' Exhibit 259, showing the unsold lands of the company in colors.

"Now, assuming that there is that number of acres of unsold railroad land in Josephine County, consisting of 167,480.98 acres, what is the fact as to whether or not there are any lands in that list, that lot, capable of actual settlement, upon which a home builder could or could not make a living?

A. I doubt whether there is. There might be once in a while a quarter-section where they possibly could by working hard, but I don't know of any where they could make a comfortable living, with a reasonable amount of work.

Q. This land that is timbered, if cleared, what would be the character of the soil as to the greater portion of the lands in that county?

A. It is nearly all poor, rocky, shaly soil.

Q. Would it or not be susceptible of agricultural use after it was cleared, even?

A. It would not.

Q. Now, Mr. Whipple, what is the fact, if you know, as to whether or not the settlements in Josephine County that have been made in the history of the state, haven't been made chiefly, if not almost entirely, on lands taken up under the Donation Act or settlement laws previous to the grant to the railroad company, as to whether or not these settlements have not absorbed practically all the land in that county that are fit for agricultrual uses?

A. They have.

Q. That is the fact, is it?

A. Yes, sir.

Q. Now, are you familiar with the topographic map of the United States, issued by the United States Geographical Survey, that has recently been placed in the hands of Deputy United States Mineral Surveyors and other officials of the United States?

A. They are on sale by the Government.

Q. You have seen those maps, have you?

A. I have."

Whereupon witness further testified that he is familiar with Defendants' Exhibit 310, being a topographic map of the United States, issued by the United States Geological Survey and recently placed in the hands of deputy United States Mineral Surveyors and other officials of the United States called "Riddles Quadrangle," showing the topography of a section of the country from Roseburg south. Whereupon de-

fendants offered and there was received in evidence said map, marked Defendants' Exhibit 310, which is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such. Whereupon witness testified that Defendants' Exhibit 311 is a map of the United States Geological Survey, prepared by George Otis Smith, Director, showing the topography of the quadrangle, known as the "Grants Pass Quadrangle." Whereupon defendants offered and there was received in evidence Defendants' Exhibit 311, which is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such. Whereupon witness testified that the small black dots on these maps represent buildings of all descriptions and kinds and he thinks every building in the whole quadrangle is marked on the map, all sorts, cabins and houses, barns and buildings, and mining camps and everything of that kind, including cabins of homestead claimants, or any cabin built by any one, whether occupied or not. It also shows mines, roads and trails, mountain peaks and buttes and bench marks with the elevations. Everything is explained on the back of the map. Whereupon on cross examination witness testified that he had resided in Oregon about twenty-five years, fourteen years in Josephine County. He had never resided in Jackson County, but had done some work in there, surveying and cruising. His occupation during this time has been that of a surveyor. He has prospected some and located a few timber claims—cruised for timber. He was deputy United States Mineral Surveyor for four years and deputy

County Surveyor about 1909, 1910 and 1911, but not regularly employed during these three years as such deputy County Surveyor, was employed only as work was done, as called for by people living there, temporarily as the work required, but was deputized all of this time, doing work whenever it was called for. Several years ago, he was employed during this period by the Oregon and California Railroad Company, classifying lands of different kinds and attending to protests of mineral cases. It has been about ten years since he has done any work for the Railroad Company, and was employed approximately only eight or ten months, and then was a kind of an agent for the company for these lands in the Illinois Valley in Josephine County, for three or four years. He attended to all the cases wherever they had land applications; he went and looked at the lands to classify them and establish values. In classifying lands, he went out and examined the lands and classified them as to what they were best adapted to, agricultural or grazing, or whether timber, etc., made a statement exactly what they were and gave the general description of each 40-acre tract, in every section. He received his instructions as to what land to examine from Mr. Andrews, acting land agent for the company at that time. Descriptions were sent to him of each tract, that he examined, or 40 sometimes. Sometimes there were only forties that were unsold in some sections. He examined only the lands, descriptions of which were sent to him. These were not lands that had been applied for, to be purchased from the company. Those that

were examined for classifying, except a few tracts that had been applied for to be purchased from the company, but most of the lands that he had examined for the company were not in Josephine County. In Josephine County, he only examined those lands that people applied to purchase. It is not true there are scattered throughout Josephine County a great many very fine ranches and farms. There are not very many good, nice farms in Josephine County. There are a great many fruit ranches in Josephine County, but he does not consider them first class. They have been asking pretty high prices for these fruit farms, and marketing quite a good deal of fruit land down there, during the last four or five years especially. He knows in a general way, pretty well, but not altogether, what lands are railroad lands, and what are in private or public ownership, in Josephine County, and knows that there is a big body of railroad land in general sections or communities. He has looked over the railroad maps and run a great many lines, and knows from running the lines which are railroad and which belong to settlers, and he has looked up a great deal in the assessor's office to find out. He often needed to know the ownership of different tracts. He has testified that lands that were susceptible to agriculture within the limits of this grant had been taken up under Donation Land claims and other entries, nearly all of them. These granted lands, he thinks, have been withdrawn from entry since about 1870 and he knows that the railroad lands could not be entered by a donation claim, or homestead entry, or any entry pro-

vided for by federal laws, not at present; all that was taken up, was taken before the land grant, that is, all that was obtained from the Government. Then there is some that has been purchased from the railroad company. He attended to the sale of quite a number of pieces that had been contracted for, at least, from the railroad company. His acquaintance with these maps, Defendants' Exhibits 310 and 311, has been obtained by purchase of them from various people, who handle the same through the valley, and perhaps from some Government officer. Whereupon on redirect examination, witness testified that these fruit farms or ranches referred to, are situated along the Rogue River, and all of the ground nearly that is surveyable, that is reasonably level, so that they can plow it, has been planted to orchards—fruit trees and grape vines and such things. None of these fruit farms or ranches that he knows of, are on railroad lands.

"Q. Is it or is it not true that the fruit ranches are mainly in the Rogue River Valley, on lands that were obtained from the Government of the United States under the Donation Land law and the other settlement laws of the United States, and not on railroad land excepting on occasion where lands had been sold in the early days to purchasers?

Mr. Rabb: Objected to as leading.

Mr. Fenton: Yes, it is leading. I admit that. You may answer.

A. That is true."

Whereupon, FRED H. McCLURE, called as a witness on behalf of defendants, and being duly sworn, testified that he is forty-two years old, resides at Portland, Oregon, and is a photographer. He has been a photographer for ten years. During 1907 and 1908, he took a number of photographs at the request of Angell and Fisher. Referring to Defendants' Exhibit 270 witness testified that he took these photographs of this land, and made the notations on these photographs, explaining each. To which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified that these photographs correctly represent what they purport to show. Homer D. Angell accompanied him on one trip when these photographs were taken and A. W. Rees and Ben Irwin accompanied him on all the other trips that he made. One of these three was present at the time each of the photographs was taken. He cannot state whether or not Angell accompanied him at that time and was present when the photographs were taken to which the name of "Angell" is attached to the memorandum on the photograph; and he cannot positively swear that Angell was present when he took the pictures that Angell had his name attached to, but he can say that one of the three persons mentioned was present at the time each of the photographs was taken.

Some of these photographs were taken in Columbia County. They went to Houlton and then went west from Houlton by wagon usually into these mountains or forests, where these photographs were taken. They could not go by wagon to these claims, a great many of them they would only get access to, over trails. They went on foot by trails usually. The country was extremely rough, and covered with trees. He is familiar with forests and would say that these lands where these various photographs were taken are heavily timbered lands. The predominating tree was principally fir. There were occasionally cedars. Some of these trails were well defined and others extremely hard to follow. He could not say where was the nearest railroad point to these places. He left the train at Houlton on the line that runs to Astoria, formerly called the Northern Pacific. These lands are situated in Columbia County. Some of the other photos were taken in Linn County. The only knowledge he has as to whether these descriptions of the lands contained in this memorandum are correct or not is that he got his descriptions from notices posted on nearly all of the cabins. Those accompanying him in some instances, assisted in verifying the descriptions and locations of the property. Several of these cabins at the time these photographs were taken were occupied. He thinks in one or two cases the people were present. There were not more than one or two instances in which any one was living in these houses or cabins at the time. Most of them were vacant. Some of them had evidence of occupation,—blankets, food,

etc. In most cases, the people that purported to own the cabins, or to claim them, were not there. The McLaffertys were there. The date stated in the memorandum attached to the photographs is about the time when the McLaffertys were there with their families, as well as he can recall it, but he cannot swear to the date. He noticed that one of the McLaffertys had two children. He does not know how long they have been living there, and does not know whether they are living there yet. They did not have anything in cultivation around there, except as shown in the photographs. He took all of the improvements which these people had, on the premises. He tried to show a general view of the surroundings. He does not remember any improvements, and did not see any garden, or grain fields, or orchards or trees planted, or school houses or any other evidences of settlement, excepting these cabins. In one or two cases there may have been a way to get a wagon to some of these cabins, but of this he cannot positively swear. Most of the cabins were pretty close together. There was one case on the other lands on which a man had a cabin, an old homestead which was occupied. He did not see any old homestead cabins that were abandoned and does not remember any habitations of any kind, except the one mentioned. He has taken other photographs for the company in Linn and Columbia Counties and made one trip into Clarke County, Washington, but has taken no others, except that he does recall that he took some photographs in the neighborhood of Bridal Veil, in the Eastern part of Multnomah County. Whereupon on

cross examination, witness testified, that he was employed to take these photographs by the Oregon and California Railroad Company, by Angell & Fisher, who were attorneys for the company. He was employed in taking these photographs, in the actual work of photographing the locations, sometimes they would be out for a week, sometimes a day or two. When there were several applications made for land, they would send him out with Rees and Irwin to take the photographs, but usually they would not go out for one application. He was sent out to take photographs of places which parties had applied to purchase from the company, meaning the McLafferty applications, involved in the Lafferty suits, and described by Lafferty as "actual settlers." In taking these photographs either Rees or Angell usually directed him as to the position he should set his photographic apparatus, in taking the pictures. They selected the spot where he should set up his apparatus and photograph the places, although he had a certain amount of latitude, and was supposed to show the general conditions in different directions. He was working under their direction. They were with him, had charge of his work and directed it, and he received no orders from any one but them. He was engaged by them to take the photographs and naturally took them where they told him. He did not engage in the examination of the lands and he is not a timber cruiser, or anything of that kind. They usually cruised the land and he took the photographs. In each individual case, it depended on the nature of the ground, how long it would take to

cruise it. He would remain on the ground sometimes while they cruised the timber and sometimes he would follow them. He could not say how long he would remain on the quarter-sections, the average time. Usually there were several pieces to cruise in one neighborhood, but it would take but a short time to take the photographs. Sometimes they would be in a week for several claims, located in one spot. They came there and would go out and cruise the land and he took the photographs. They did not stop longer than a day on one particular claim. He never attempted to go over the ground and examine the territory. He could not report on the ground. He carried his camera after the cruisers and had about all he wanted to do, on account of the rough ground. He knows nothing about the descriptions of these lands except as he has testified to the notices and so on, on some of the doors. It is possible that one can so set a camera or photographic apparatus, in taking a picture, that if a house set at the edge of a clearing, in a clump of trees, the picture would show a forest, the house in or on the edge of a forest there, without showing the clearing behind the camera, the photographic apparatus taking nothing but that which is in front of it. The photograph is taken, embracing a certain angle in front of the camera and does not show what is behind it. Whether one can take in a wooded country, a very small area in a photograph, depends on the lens. If one uses a wide angle lens, he can embrace about 75 degrees, if a longer focus lens, one could embrace less, a longer angle. These photographs and these cabins

show a very small area of land, they show probably 45 or 50 degrees angle. The photographs would take about 45 or 50 degrees, probably. None of those cabins or houses shown in the photographs, are very large. The relative area covered by the picture can be compared with the cabins shown on the land, although if the cabin is in the immediate foreground it shows much larger—naturally shuts out more of the distance. In most of the cases, the photographs were taken in different directions, to show the general conditions around the cabins, that is, several photographs were taken of each cabin. Possibly these owners of cabins, or occupants, may have been temporarily absent during his visits there. He was there only a comparatively short time and did not attempt to make a general examination of all that country there. He took the shortest and most convenient route for going in on to these lands, and was not looking for school houses, churches, or anything of that kind. He simply went up there to take the photographs of these lands as he was directed to do. He was glad enough to stick to the trails, without getting outside to look for schoolhouses or churches. Whereupon on redirect examination, witness testified, that naturally any schoolhouses or churches along in there, he might have seen them, and would be near the trail. He saw no clearings out there in those woods, of any consequence, except on a homestead that was not on railroad land. He does not remember any other clearing that was larger than a quarter of an acre. He thinks the man on the homestead had three or four acres cleared. The balance of his land was heav-

ily timbered, just like these. From appearances, this homestead had been there a number of years. The man's name was Schweitzer. He cannot tell how far out from Houlton his place is. It adjoins some of these railroad claims and he had no neighbors for a good many miles, except the applicants for this land, meaning these people that began to make application after this agitation came up to purchase at $2.50 an acre. These photographs Nos. 104, 112, 111, 108, 109, 106, 126, 127, 120, 121, 123, 124, 101, 100, 97, 98, 115, 117 and 118, were taken near Larch Mountain, in Multnomah County, near Bridal Veil, about twenty-five or thirty miles east of Portland. He made the notations that appear on the photographs and he can only identify the location by the notations made on the photographs. These notations made by him appear in the photographs and were made directly on the negative, so there is no possibility of making a mistake. He got the description in most cases from the notices on the cabins, in some cases from the people who accompanied him. He got the description of the name of the applicant, like William Cain, from the notice on the cabin. He is able to verify in most cases, the photograph and the description from his own examination made of these notices, which he now sees in the photograph. Whereupon on recross examination, witness testified that he made certain notations on these photographs, directly on the negative, printed on with the print, so there could be no discrepancy, and made the notations after he returned from the trip. He made notes on the trip, and made the notations on the nega-

tive from the notes he took on the trip. In some cases, he found in his book that he made a record of the different entries or notations on the negative. He knew what section, township or range to put on the negative, because the plates were numbered before he took the pictures. They correspond with the numbers on the negatives. For instance he took No. 18 and put down the section and number and township and the man's name, and the direction in which the photograph was taken, keeping the photograph or numbered plate. They were always numbered. Referring to his book, he was employed in this case nine days in taking these photographs, but this book does not embrace all. His book shows that the photographs were taken between September 24, 1907, and at different times until November 18, 1908, including the photographs of the so-called Lafferty actual settler lands. He charged from the time he left until he got back, as well as while he was on the ground. Whereupon on redirect examination, witness testified that after he got home he would then prepare his negative and make these pictures. Roughly speaking, he supposes he made a dozen trips. He was never employed by the company in any other relation than as taking pictures, which is his own business. He was employed as any other photographer might have been. He took photographs for any one who wanted them. Whereupon on recross examination witness testified, that he put in thirty-seven days and six hours on this work, including the time consumed in going to and returning from these lands, as follows: September 24, 1907, six hours time; September 26, 1907, one day's time; December 17, 1907,

nine days' time; February 1, 1908, three days' time; February 18, 1908, four days' time; May 21, 1908, six days' time; October 31, 1908, ten days' time; and November 18, 1908, four days' time.

Whereupon B. A. GIFFORD, called as a witness on behalf of defendants and being duly sworn, testified, that he is fifty-three years old, resides at Portland, Oregon, and is a photographer by profession, and has been such for about thirty-five years. His place of business is at Portland at present. He took the photographs, Defendants' Exhibit 367. To which complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that the same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified that this photograph is a fair representation of the country covered, the physical objects shown in the photograph, which it purports to show, that the matters stated in his affidavit are correct as stated, except that he does not know what the sections were, excepting as they were pointed out to him when he made the photographs there. He is not a cruiser, but that is the photograph made from the point that they went to on that trip. The place where he put his camera, was pointed out to him by F. A. Elliott, Homer D. Angell and L. D. McLeod. He obtained these descriptions in his affidavit for them, that was the only way he had of doing it. He does not know what the elevation of his camera was with reference to the elevation

shown in the photograph. He knows that it was a good hard climb to get up there. They climbed to a point so they could overlook the territroy, to get a point of view, to show the general lay of the timber and country. He has pretty nearly forgotten which way they went to get there. It is a mountainous country, the picture shows that. At the time he took these photographs he was living at The Dalles. These lands lie in the Coast Range, west of the Willamette Valley, west of Dallas in Polk County. It is so stated on the photographs. He did not keep track of that. It was some time in the spring of 1908, he does not remember the date. Defendants' Exhibit 268 is a correct photograph or panoramic view, taken from near the quarter-post on the east line of section line of section 12, April 3, 1912, and is four photographs in panoramic form; the lower right hand corner of the picture is the point from where he took the picture shown in the upper one. They were taken about April 3, 1912, and correctly represent what they purport to show. He obtained the descriptions of these lands from McLeod, who went with him on the trip. "Eagles' Rest, High Point," is the high point shown in the lower right hand corner of Defendants' Exhibit 268. The country shown in Defendants' Exhibit 268 was almost all timbered, very few clearings. One cannot see any clearings at all in the picture there from that elevation. Referring to Defendants' Exhibit 269, photographs numbered 2942 and 2943, witness says that they were made on an 8x10 plate and enlarged from that. They were made in the spring of 1912, but he does not remember the dates. They are cor-

rect representations of what they purport to show. He cannot state from his own knowledge whether Defendants' Exhibit 269, showing where photographs Numbered 2942 and 2943 were taken, are in Columbia County, only from what they told him, that is, the particular place where these photographs were taken were pointed out to him by McLeod and Roy Woods. The upper large photograph shown in Defendant's Exhibit 269, shows in the picture that there were no openings there, in the foreview, and that it was a solid forest. The back view, according to the angle, of his lens, would give him a distance of about eight or ten miles in prospect or in view, measured in distance from the outside of the picture to the outside of the picture. The dark colors in the distance in the lower large photograph, indicate that it is all timbered. It looks like pretty heavy timber in through there, from his actual vision, that is, what they traveled through was. The length of the prospect or view as shown in the lower photograph would be about the same. It was made with the same angle as the other one was. He does not remember what was the angle of the lens that he used. He would have to measure that, before he could tell, that is a long way off in the distance, it would cover a wide space. The photograph is a correct representation of what was actually there on the ground. He took all the photographs shown in Defendants' Exhibits 267, 268 and 269, and made all of the photographs Numbered 2944, 2945, 2948, 2950, 2951, 2952, 2946, 2947 and 2949, being nine photographs in all, and numbered Defendants' Exhibit 270, about June 28, 1912, and they

correctly represent what they purport to show. He obtained the description noted on the photographs from the plats they had there, which they showed him. He is not a cruiser. Some of these cabins were occupied and some were not. There was certainly no one living on the premises shown in Photograph No. 2949. He could not say as to Photograph No. 2947, he did not see any one there. There was a party at 2952. 2944 was vacant and also 2945 and 2948. 2946 and 2951 are timber pictures. Rees, Wood and Kempton are shown in Numbers 2948 and 2950. There was an old man living in a cabin on 2952. He does not know how long he had lived there. When he took these pictures of the homesteads, about which he has testified, he went by wagon most of the way from Scappoose, leaving the railroad at Scappoose. He took these photographs at the request of Rees. The only other photographs he took for the company, other than those he has now identified and described, was that of a cabin on the first trip, when he got this big panorama. His photographs are known throughout the United States. He took the famous picture of Mt. Hood, showing the shadow of Mt. Hood in the lake. This picture is shown all over the world. He has also taken photographs of Crater Lake, and other points of interest in the State of Oregon, and they are known everywhere. Whereupon, on cross examination, witness further testified, that he was a commercial photographer, and employed a great deal by railroad companies in preparing their pamphlets and books in the way of getting views, etc., and employed by the Harriman Lines, the O. R. & N., and Southern

Pacific Company to do considerable work. A full half circle is represented in the back ground, or far horizon of the photograph or panorama of Defendants' Exhibit 268, it would be a hard guess to state the distance in miles. It would embrace a good many miles in half circle embracing the horizon clear around. He would say, it would be surely fifty miles, possibly seventy-five, possibly one hundred, it would be a half circle. The photograph was taken after four exposures. The half circle would embrace fifty or seventy-five miles away in the distance, and from one extreme to the other, in a full half circle, it might be more than that, that could be figured out according to distance. He assumes that the point where he set his camera would probably be twenty miles across, possibly further, it might be sixty miles. It is not very difficult to judge the character of lands in a photograph a distance of this length, covering an area of this amount, not any of it that one can see, but it is true that one has but a small area of print to show an enormous area of ground, and therefore he could not set out in any detail in a photograph, showing the specific formations of the land. The panorama shows what appears to be a valley, through which appears to run a stream, but he does not know what stream that is. Along the creek there are a few ranches, one can see them there. One could not see them if he was on that point, very clearly, unless he looked for them, but they are there. Everything in sight there shows in the photograph. It would depend on the size of his picture and the distance from the photographing apparatus. Anything one can see

with his eye, one could get with the camera. The peak in the distance shown, is a snow mountain, but he does not know the name. The land in the immediate foreground of Defendants' Exhibit 269, in the upper photograph slopes down, that is the only thing deceiving in the camera, it makes land look more level than it is. When taking a picture of a mountain, it looks lower, not higher, when taken from an elevation. Generally speaking, if one gets onto a high elevation everything before one flattens—looks much lower than it is, when the camera is higher, but when it is lower it looks much steeper and higher than it really is, but those are all made from higher elevations. The photograph in Defendants' Exhibit 268, in the lower left hand corner, is made from a lower elevation that the lands shown in the photograph. The photograph on the right hand side is made from a trail that they went up on. The hills appearing in the background in the lower photograph of Defendants' Exhibit 269, are not very much higher than the elevation from which this picture was taken, if it had been, this timber line would be way up here. They were up pretty near as high as the mountains when they made the photograph. The hills or mountains shown in the background are a considerable distance away, about six or seven miles across, possibly ten, to that point, maybe twenty miles; that is away in the distance; still a range beyond this one. He obtained the descriptions of these lands upon which these photographs were taken, and the area covered by them, from the cruisers that were with him. He did not examine any corners, or know anything concerning the

sections upon which he took the photographs, or area covered by the photographs. He could only estimate the area covered by the photographs by looking at it, and judging it, that is just the area without the description. He was at these cabins represented in these photographs only for a short time while taking photographs. There was nothing in these cabins, except the one where the man was living. He was in and saw the interior of all these cabins. There might have been an old shack of a stove that fell down, something of that kind. They were seemingly deserted. Sometimes McLeod, sometimes Wood selected the spots from which these photographs were to be taken. He was employed by the Oregon and California Railroad Company to make these pictures, and thinks he was paid by checks. He did not go into the timber shown in the background in these photographs, and knows nothing about that except what he could see from where he was. He made no personal inspection or examination. The timber in the background was about twenty miles away he should judge, some would probably be nine or ten miles. Whereupon, on re-direct examination, witness testified, that when he speaks of the area covered by the photographs being sixty or seventy miles, he means to the skyline, as one sees it in the distance. If there were cultivated clearings they would certainly be visible to the naked eye and the photographs or camera would show it. He could show some clearings in this picture, referring to Defendants' Exhibit 268, and there is some in this that did not have any clearings in

sight. There is one there. If it is wished he can point out some clearings along the little creek. Referring to Defendants' Exhibit 268, he does not know how he can describe it, but there is a house right there. It is just a cabin, no one in there at all. Now just down there is a mill; there used to be a mill there, where they stayed over night. There was a little ranch there and a rancher lives there, where he has been for twenty years or more, and that is what he refers to as showing any clearings, or ranches, or houses, or any object that might be within the view of the camera. Whereupon, on recross examination, witness testified, that there might be other ranches, other clearings in the valley that could not be seen with the naked eye, if they were hidden by trees.

Whereupon **ELMER S. SHANK**, called as a witness for defendants, being duly sworn, testified that he is thirty-two years old, and is an attorney and real estate agent, residing at Grants Pass, and has lived there five years, and followed the real estate business all the time, that is, the general business of selling lands, principally in Josephine and Jackson counties. He located at Grants Pass immediately after he finished college, and was in the real estate business partly for the purpose of finding the name of every ranch owner and knowing all pieces of property, all water rights, where the ditches came out, and to secure a personal acquaintance with every resident of the county, that it might help him in prospective future law business. He would think he had negotiated sales during the time he has been in that county amounting to nearly $500,000. He travels about in

his automobiles and otherwise, about an average of 1200 miles a month. He has had occasion only to go over the lands of the company in that county as he was passing to and from lands that might be offered for sale. In the general real estate business, many people having located homesteads, wanted to sell their improvements, and would ask him, as a real estate man, to bring customers to see them, but he does not think that he was ever able to locate any one in the five years, either on a relinquishment or homestead. Most of his customers were those who were able to purchase improved properties, and all of them, upon examining the homesteads, would decide that it would not be a paying proposition to settle on them. The homesteads range from places with perhaps an acre of clearing, run-down orchard, vineyard, or berry patch, with improvements of a log cabin or shack, up to improvements and clearings which had cost as much as $8000—house, barn, well, orchard, and fencing, to which testimony complainant objected as incompetent, immaterial and irrelevant, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of this grant, settlements thereon, and public land entries thereof.

Whereupon witness testified that the average value of the improvements on the majority of these homestead claims that came to him for sale, he thinks, would not be over $500 to $700, perhaps $1000, and at the time they were offered to him for sale, these homesteads were almost invariably vacated. Aside from the improvements

referred to by him, these homestead entries had clearings from one acre up to forty acres, with an occasional piece of land that perhaps in 160 acres would have 60 acres that might have been more of the nature of prairie; but he would be incompetent to say whether it was really prairie or not, but it looked as such, that is, grazing land. He would not think that he had noticed over a dozen of these places that had as much as forty acres cleared. They were on what might be termed the first or second benches. First are the river bottoms, and then first and second benches, and then the hillside land. From what he has seen of abstracts, and from his acquaintance with the old settlers there, he thinks most of the present occupied land was taken by pre-emption and homestead—he doesn't know exactly what the law was—Donation Land claims they call them down there, and these were taken between the years 1852 and 1880 largely, he thinks. He thinks the map of definite location of the line of railroad of what is now the Oregon and California Railroad Company for his territory, was made some time during the year 1883. Prior to that time, all the lands not too heavily timbered were taken, and run as agricultural, horticultural, or grazing land. There was a time, about 1890, when the first large planting of orchards occurred in that valley. The bottom and river lands contained most of the orchards. Then there is another class of lands in little coves, protected sub-irrigated spots. He thinks nearly all of these lands fit for orchard use, were taken promiscuously from the even and odd sections, but mostly before the withdrawal of any of the railroad lands. The

Railroad Company got very little of these lands that are suitable for that purpose. From his investigation and knowledge of others at Grants Pass engaged in the timber business, he would say that from eleven and twelve to sixteen per cent of the total unsold lands of the company in Josephine County would be chiefly or solely valuable for timber purposes. From his knowledge of the total area of these unsold lands of the company in Josephine County, he would say that between four and five per cent of them is capable of being put to agricultural uses, but of this four to five per cent there is about three per cent that on account of being heavily timbered, uneven in character, or burnt over land, would not be agricultural until the land was cleared, the expense of which would run from $40 an acre to $75 and $100 per acre. He has had considerable experience in paying for clearing land of that kind. A settler generally tried to get as much cleared ground to start with as possible. That is the drawback against his country. The land costs so much to be cleared, and it is easier to sell at twice its intrinsic value, land that is cleared, above that which is not cleared. There are two general divisions of soil in Josephine County, red soil and granite soil. The unsold railroad land is largely granite land or red land, of rather high elevation, meaning by high elevation from 1600 feet upwards. Geographically speaking, that district is very old. It is of volcanic formation, and thrown in a great deal of confusion. The ranges are not long, but are broken—short, steep hills—and wherever the grade is above twenty per cent, it is very rocky. He would think

that twenty or twenty-five per cent of this unsold land was quite rocky, but as to be totally unfit for cultivation, that it is a question almost impossible for him to answer. Not over two and a half per cent would be available now for practical settlement. They class the unsold railroad land with Government land. Most of their customers are from the Eastern or Central States. The old definition of homestead in these timbered countries is used—that the Government bets the settler 160 acres of land that he will starve to death before he can prove up on it, and the Government usually wins, that is his regular stock description when one wants that land.

Q. In other words, if the land is not valuable for timber, or for mining purpose, or some such purpose of that kind, neither the lands within the even sections nor the lands within the railroad sections, would be available for actual settlement? Is that your answer?

A. No, sir.

Q. That is the way I understand you?

A. Yes, sir.

Q. That is correct, is it?

A. Speculative investment on these unsold lands, both the unsold railroad land and the Government land, is about the total of the market possibility today.

Q. Well, now, what speculative investment would anybody want to make of these lands? What would there be in there that he might speculate about?

A. There is a class of people in the large cities of

the East who think if they can buy any land at $2.50 to $10 an acre, they can sell it at an advance.

Q. That is to say, the class of people that would buy acreage, but would not know whether they could get good land or bad land?

A. They expect to raise nothing on the land but the price, and they think if the price is below a certain point, they can make a profit.

Whereupon witness testified that he does not know very much about the mineral side of Josephine County. As a general popular understanding in his county, they consider it a pocket country. There are pockets, and a host of prospectors continually fitting out, hunting pockets. In the Illinois Valley the "Queen of Bronze" seems to be a good mine, and slightly west from that, running north and south, is a ridge that seems to be of consistently strong formation of copper, the Alameda, in the Galice District, being in this line. There are some reputed good placer gold mines near Leland, and west of Leland, near the Alameda, which is a mine of high percentage ore, quite famous in that part. His general information as to the Columbia mine, is that it is about six miles from Leland, and it is a gold placer mine entirely. Gold mines are usually quartz mines in that county. Copper, he thinks, is almost entirely ore. There are two smelters in that county, one at the Alameda, the Galice District; one at the Queen of Bronze, at Takilma. He believes the Queen of Bronze is outside of the 30-mile limit of this grant, and is forty miles from Grants Pass,

but just where the line directly from the railroad cuts through, in relation to that mine, he is not positive. The other smelter is about twenty-five miles from Grants Pass, and sixteen miles from Merlin, which is nine miles from Grants Pass. The climate where this railroad land is situated, is quite dry in summer time. The country needs irrigation. It is the best climate in the world. Rogue River runs beside or through Grants Pass, which is six miles west of the line dividing Josephine and Jackson counties. The valley there is somewhat narrow. In Jackson County, about twelve miles east of the county line between Josephine and Jackson counties, the valley becomes very broad, and of a prairie nature, extending at right angles to the course of Rogue River and running south up Bear Creek to Ashland, about twenty to twenty-five miles. The Rogue River valley is about eight to twelve miles wide. There is very little level land of the unsold lands of the company in the Rogue River valley between Ashland and Grants Pass. There is a tract of land in the Rogue River valley called The Desert. It is known to almost every person that has ever passed through that country. It is largely unsettled. There is a land scheme on foot which claims to be able to make a part of it productive under irrigation. Without irrigation it is valueless. There is no unsold railroad land in that desert. There may be some on the northeast part of that in Jackson County, but he is not very familiar with the land on the east side of the desert.

Whereupon, on cross examination, witness testified that he has lived in Grants Pass five years, engaged dur-

ing that time in the practice of law and selling real estate, and generally dealing in all kinds of land, all kinds of types and soil, in the general real estate business, selling whatever was listed. He does not know what proportion of these lands handled by him has been fruit land. The largest acreage has not been of fruit land sold, although it can be said that any land sold for any purpose, is still good for some kind of fruit in that valley, but the lands handled by him have not been what are called fruit lands in contradistinction to other lands. The largest total of dollars in transactions has been of fruit lands, but the largest acreage in other lands. In 1908 he made a study for about six months of each particular section of railroad land then unsold in Josephine County, thinking that this might be sold some time in the near future very rapidly, and he wanted to be the best informed of any of the real estate men in that section in regard to the lands. He got the descriptions of the unsold railroad lands from Roseburg, he thinks from Mr. Alley's office, and got a series of blue prints, and from them could tell which sections were unsold, and there are a number that have had settlers on a short time. To get the boundaries of these adjacent to owned lands, the ones that would be first attractive to purchasers, he would get them largely from owners, hunters, timbermen, cruisers. He was not positive within 15,000 acres before today of the accuracy of the area of unsold lands of the company in Josephine County. He thought in that county there were from 160,000 to 175,000 acres of unsold lands. His knowledge of the boundaries of these lands, was gained largely

from others, but the knowledge of the lands was by walking or driving over or around them himself. He would think that he had made a personal inspection of 120 quarter sections, around in that neighborhood, of these lands, included in the grant in Josephine County. He figured from 36 south, 6 west. These quarter sections were from 36 south, 6 west, figuring north to near Glendale, around Wolf Creek, and down to 38—to 40 south and 2 east, along that right of way out 20 miles—about 10 miles east and north of the railroad right of way, and 20 to 40 miles west, wherever they happened to occur. Glendale is thirty-three miles north of Grants Pass, in Douglas County. Grants Pass is in 36 South, 5 West. He has made an examination of these lands about twelve to eighteen miles northeast of Wimer. Most of those lands in there are valuable for timber, and he has looked at them from a timber standpoint, but he has not made a personal inspection of all the odd numbered sections in that township, referring to Township 35 South, Range 4 West. He has not examined over twelve sections, he would think, in that locality. He has examined Sections 31, 35, 27, 25, and 5 and 7, in that township. He believes he has been over every piece in 36-4; most of the north half of 37-5; nearly all of 38-5; everything in 35 south, 6 west, and has been all over 36-6 west, and personally inspected that. He has been in all of 35-7 west, excepting 19 and 31. There may be five sections in township 35, range 7 west, that he has not been in. This is at the upper head of Pickett Creek, and he has not been north of that. He has been in

everything in the east four tiers of sections in 36 South, 7 West, and in 37 South, Range 7 West, except two or three sections in the southeast part, and probably all in Township 37 South, Range 8 West, excepting sections 5 and 7. Of these lands mentioned, he would not think that over five per cent would be agricultural land, or could be rendered so by clearing where there is any growth that would need to be cleared. There are 20 to 40 acre patches of good agricultural land yet unsold of these railroad lands; but, for instance, in 36 South, 4 West, in Josephine County, nearly the entire amount of land is rock. It is not good for anything, never will be unless the climate changes and the rock decomposes. He would think that on Evans Creek seven to ten per cent of that land in Township 36 South of Range 5 West, would be available for agricultural purposes, but it is a poor class of soil. It has much granite in it. He did not in his direct testimony estimate that eighty-five per cent of these unsold lands were not good for timber, but that fifteen per cent had good timber, and that four per cent was agricultural land. The homesteads that he had for sale were largely relinquishments that had been brought to him to put on the market, but he never sold one. He made a business of dealing in homestead relinquishments as a competitor in the business; he had them offered, but never succeeded in selling one. He usually spoke against them because in showing two dozen in five years no one ever bought. He always had something else that attracted more than that. Some of these homesteads had valuable improvements on them as much as $3000. He had

one particular homestead in mind for sale with $3000 improvements on it. It was in 36-6, or 37-6. He would not say that the greater portion of Josephine County is waste land. The two largest valleys in Josephine County are the Illinois Valley and the Rogue River Valley. The Illinois Valley was settled about 1852, and twenty years ago, from what he could see of the buildings and improvements and the old orchards, that valley was far ahead of where it is now (1912) in total valuation. The price of property generally, has increased in that valley during the last fifteen or twenty years, as a general proposition, a very large ratio of increase, but the Illinois Valley was intrinsically worth more fifteen or twenty years ago than it is now. The ranches and farms situated in Josephine County are generally irrigated. He believes there are a few successful ranchers in Josephine County, who have no irrigated lands. Fruit propositions are about the only successful non-irrigated propositions. Josephine County is more profitable for agricultural pursuits with irrigation. The conditions are extremely varied. Nearly all land will be benefited by irrigation; some land must have it; a few spots are sufficiently sub-irrigated for fruit, and some bottom soil, with years of the rainfall of 1912, irrigation would be unnecessary. He would not say that you could not successfully operate a ranch without irrigation in Josephine County—that would be stating it too broad, because those who come there, the Easterners, think they can make more money by paying higher prices for the irrigated land. Therefore, the unirrigated lands are not

sufficiently tried out. The cultivation of the non-irrigated lands is not on a broad scale, by a class of people who farm it as well as it should be. As a general proposition, farming in Josephine County is not really successful without irrigation, except bottom lands. His knowledge of mineral lands is rather inferior. His personal experience in mining operations in Josephine County is from personal examination with prospective settlers in the valley, visiting mines or so-called mines, but he never panned a half-dozen pannings in his life, but can detect whether there is gold there very quickly, and knows the character of dirt which pays. In visiting these mines, specimen pannings have been made to show investors what the value per pan would be. He has gained as thorough a knowledge of mining, geologically speaking, in perhaps an aggregate presence, with expert miners, of thirty days in his five years there—whatever that amounts to. He has made a study of mining in so far as it affects Southern Oregon and Northern California, but is not a practical miner. He is a geologist. His knowledge was gained from personal inspection with men who have knowledge of the leading mines and prospects of the community. He has inspected Granite Hill with Mr. Morphy; Swastika with Mr. Howland; Queen of Bronze; the Michigan mine; Logan mine; Wimer mine; the mines on the Three Pines Timber Company land; Greenback. He would go to these mines with the manager and would have an automobile of four to eight people—one or two automobiles of people—to look over the country—capitalists from the East. They would

follow the manager or foreman of the mines and learn all that they could therefrom. As a geologist, he tried to use his brains. He did not feel qualified to locate a person upon a mine, but could pass upon the mineral qualities of the land.

Whereupon R. L. BOOTH, called as a witness on behalf of defendants, being first duly sworn, testified that he is sixty-eight years old; by occupation, stock-raiser and farmer, and resides about seven miles north of Willamina, in the southwest part of Yamhill County, and has lived there since 1869. He lives in section 1, township 5 south, range 7 west, and is pretty well acquainted within an area of six miles each way from where he lives, but he does not know much about the land in Tillamook County, and is not acquainted west of McMinnville. His knowledge extends to the even as well as the odd sections within that six mile area. The township of railroad land east of him there is principally timber, saw timber, good timber, and he would say that that is the chief value of that land. The other railroad land there has dead fir timber on it, burned down many years ago. The snow-fall in the high part of it is six feet in the winter. The burned over land is red shot land. This burned over area was at one time covered with heavy timber. There have been saw mills there. There has been scattered timber on the creek west and northwest; it is all dead, that is, practically speaking—just a few trees left. The burned over land is good enough soil. The timber is of no value at all. The stumps are still there pretty thick. It was good timber, some of it—

very nice timber—large fir timber. The roots of these trees are still in the ground and sound. It would probably cost to clear timber land of that character from $100 to $125 an acre, and it could be cleared. It would cost that per acre to clear it, the best a man could do. The low lands, where the hills are not so high, would be pretty good fruit land. On the ridges, where the ridge switches off, the land is pretty steep. He thinks that there would be about twenty-five per cent of this land that could be cultivated if it were cleared, and this is true of the even sections in that same territory. He was County Commissioner eight and a half years. He would not want to farm this land on the higher points, which is covered with five or six feet of snow. Crops would be late starting in the spring, and the weather would be cold early in the fall, and he does not think it would be practical to use for agricultural purposes. It might do for grazing—something of that kind, but not general farming. He is an old pioneer of his county, and is a cousin of Senator Robert A. Booth, but has no business relations with him, and has not seen him since he went out to the saw mills.

Whereupon, on cross examination, witness testified that his home in Section 1 was taken up as a Donation Land claim before the line of definite location of the railroad grant was filed. He bought his land, and it had been under cultivation prior to 1869, when he went there. He knows the country at large but not the definite sections. He has followed stock business principally. He is not engaged in active farming now, but

has been. He has been in the county business, but has not done much since. Stock business is what he has followed principally—raising cattle and hay, and that is what he does. In his community they use the land a good deal for cattle range. If this unsold railroad land in that locality was cleared off, it could be used for grazing purposes, but would require labor to clear the lands off. He has been through the Tillamook country to the coast, through the Salmon and Trask. Next to the coast there are dairy ranches—clearing the land off and raising grain on it, but they are not doing that in his vicinity. After one gets over the ridge in Tillamook, there are lots of that kind. That shot soil on these ridges produces fair when cleared off, that is where it is not on the high land, but on the ordinary ridges where it is not so high. The land spoken of covered with snow, is only covered with snow in the winter time, and would produce grass all right. The altitude of that land is about 700 feet—the ridges way below that. He does not know how high that would be, not the main ridges. The surveyors told him that these ridges were about 700 feet high. The community is pretty well settled south of him, down below, the valley part is all thickly settled, and he has a number of neighbors in his immediate vicinity; his nearest neighbor is about half a mile away. That is an old settled community. The valley has been settled quite awhile—been taken up by Donation claims. Yamhill County at large is a fruit country, and some of this land referred to by him would be good fruit land, meaning these hillsides. He could not say anything

about grape culture, because he does not know, because it has never been tried there. He could not say whether grapes would do well or not. They raise English walnuts in Yamhill County, but not in that part. They raise them out more towards Amity, in the red hills. He could not say whether walnuts would do well or not on these lands; they have not tried to raise them, and he could not say anything about it.

Whereupon, on re-direct examination, witness testified that he lives on the Al Gates Donation Land Claim, and the Charles Fendall Donation Land Claim is right down the valley south of him, about five miles from where he lives. All of the agricultural land, practically, on Willamina Creek was taken up under the Donation law or Homestead law.

Whereupon H. W. SCOTT, called as a witness on behalf of defendants, being duly sworn, testified that he resides at Forest Grove, Oregon, and is engaged in real estate and farming and has done more or less cruising of timber lands for the last twenty years, spending considerable time at that work, but could not say exactly how much. He has cruised lands in Washington, Yamhill, Columbia, Clatsop, some in Douglas and a little in Coos County. He has lived in Washington County about twenty-two years and in Yamhill County about ten years but never resided in Tillamook County. He is familiar with the timber lands in Tillamook County in a general way and with the timber lands in Clatsop and Columbia Counties. He knows that these unsold lands

in Washington County were obtained under two grants which overlap each other in that County. He is familiar with the lands say from 1 south 4 west, on west. He has been over the country in a general way, east of there, but never paid any particular attention to that. In a general way he is familiar with the lands in township 1 south, ranges 4, 5, 6, 7 and 8 west included in this grant; also township 2 south, ranges 5, 6, 7 and 8 west; township 3 south, 5, 6, 7, and 8 west; township 4, 6 and a little in 5 west; in 4 south, 7 west; 5 south, 6 and 7 west; 6 south, 6 and 7 west; 7 south, 6 and 7 west; 8 south, 6, 7 and 8 west; 9 south, 6, 7 and 8 west. He is not very well acquainted, only in a general way, with the lands of the Company north of the Base Line and west of the Willamette Meridian in townships 2 and 3, ranges 2 and 3 west. He never did any cruising in that part of the country but has been through the country there. Township 2 south, range 2 west is in Columbia County and part in Washington County. In the east, along next to the Willamette River, he never did any cruising but has been through it, all through all of that country there and has been through township 3 range 2 north of the base line and west of Willamette Meridian, where the green marks are on the map, referring to "Defendants' Exhibit 259" and has also been through township 3 north, range 3 west; township 1, range 5 west; township 1 south, range 6 west; township 3 south, range 1 west; township 1 south, range 2 west; township 2 south, range 2 west; township 1 south, range 3 west; township 2 south, range 3 west; township 1 south, range 4 west;

township 1 south, range 5 west. Some of these lands involved in this suit are in Tillamook County and he is familiar with these lands. He is familiar in a general way with the timber lands in Columbia County belonging to the Company but has not cruised that part and has cruised in Tillamook County in 1 south, 6 and 7 west; 2 south, 6, 7 and 8 west; 1 south, 1 and 2 west; 3 south, 8 west. More particularly than in other parts of Tillamook County, and has cruised in townships 2, 3 and 4 south, range 8 west; townships 3 and 4 south, range 7 west. He has cruised and is familiar with lands of the Company in Washington County south and from 1 to 4 west, but not east of that and has sold considerable lands of different kinds and different descriptions, and he generally goes through and looks it over; sometimes he looks it over in a general way and sometimes for people who wanted to know the amount of timber there was on it. In cruising a piece of timber land, one finds a section corner, or as near as possible, of the land, and paces the distance off to the land to be looked at or measured the distance with a tape line or chain, sometimes both, but ordinarily the distance is paced. There are several ways of doing the work. He begins at a corner of a forty, called single lining it, and paces off half way through that forty, if it is wanted to cruise 160 acres of land he paces off 250 paces and then runs through the center of that forty to the center of the forty, if going north then west through the balance of that forty to the center of the next forty, then south through the center of the forty and south to the section line where he started to check up and see how

he came out. If they are "double running" it the process is reversed and the work is done east and west. They get the amount of timber there is on the land, the general topography of the country, the way the streams slope and all kind of data in regard to the land, timber, soil and one thing and another. In making this cruise or search he would ascertin the character of the land as to soil and as to its being capable of settlement and as to its best possibilities. The character of the unsold land of the Company involved in this suit situated in Washington County is generally rough and broken, heavily timbered in a great many cases and a great deal of the land is rocky and not fit for cultivation on that account. It is unfit for cultivation on account of being too rough, steep and broken. In a great many cases there is quite a high altitude, snow getting very deep in the winter. The soil is generally all coarse mountain land and very unproductive. In order to clear this land for cultivation it would require ordinarily from $100 to $200 an acre to put it in cultivation, to which testimony complainant objected as incompetent, immaterial and irrelevant, and it was agreed between the parties that this same objection should be considered taken as to all testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof.

Whereupon witness testified that not over twenty per cent of these lands in the aggregate could be used in any way for agricultural purposes, even after the timber was cleared off, and he would not consider, in his

judgment, that any of it would be available for any agricultural purposes without the removal of the timber. There might be an isolated case where somebody has gone on to a piece of land, cleared up a few acres and abandoned it. There are a few cases like that where they started out on it and could not make a living on it, referring to both the even and odd sections. He saw a great many places in the last two or three years where there were notices tacked up on trees notifying people that they had settled and located on a certain piece of railroad land and every case that he ever saw where these notices were, was always where there was good timber. He never saw notices posted up on the burned places. From his observation within the limits of this grant, the so-called "actual settler" notices were posted on heavily timbered land, chiefly and only valuable for timber. He would say that probably one-fourth or one-fifth of the railroad lands in Washington County had been burned over. Formerly this area was heavily timbered and it now has left burnt trees and logs there. The large part of that land would not be fit for anything that he knows of and it would cost to clear from $100 to $200 an acre. It would not be any more suitable for settlement than any of the rest of it and there would not be more than twenty per cent of it that would be fit for cultivation. The soil is coarse mountain soil, coarse shot and clay and often rocky. The largest part of this land is of a high elevation, some running to about 3,000 feet elevation, and snow gets in there six and seven feet deep lots of winters and lays on sometimes for a big part of

the winter, some parts of it all winter, three or four months at a time. There are a great many homesteaders on the even sections within the limits of this grant in the Counties of Washington, Tillamook and Yamhill, who have abandoned their claims before they proved up and others took them up. A great many of these homesteaders who have proved up on the lands have abandoned them afterwards. They could not make a living on them. These homestead claims that have been proved up have been bought up generally by timber companies. He remembers one place on the South Trask on the bottom where it was settled up and houses were there, were settled twenty-five years ago and ten or fifteen years ago they were all abandoned, the houses going to rack and some of them had quite little clearings in there. They sold these lands. Some of these homestead entries within the limits of this grant with which he is familiar were abandoned before final proof, they were finally retaken. A great many of them were taken under the timber and stone act and proved up under that act. The lands within the limits of these grants in Tillamook County is very rough and mountainous, steep and broken and rocky in a great many places, heavily timbered and chiefly valuable for its timber, the only value that he considers the land has now. It would cost to clear any of these lands that might have the soil that could be utilized for agricultural purposes $100 to $200 per acre. He has had a great deal of experience of this kind of clearing up. Three years ago he cleared up some heavy timber land of his own. He blew the stumps out with powder and it

cost him all the way, for powder alone, from $40 to $80 an acre. After that he had the holes to fill up, the logs to burn up, the blasted stumps to clean up and he don't know exactly, because he did a great deal of work himself and the boys, and he never kept any exact account of the labor, but kept an account of the powder because he was trying to find out whether it was profitable to use powder or clear the land without powder. It costs in those cases ordinarily $150 an acre. That was about what he estimated it did. This land of his was situated in township 1 south, 4 and 5 west but had been originally homesteaded, but he had bought it. He owns 430 acres in one body about seven miles from Forest Grove on Scoggins Creek. Part of it is on high lands and part on low lands. He has cleared of this land about 40 or 50 acres from time to time extending over a number of years, some one time and some another. Part of this homestead owned by him was agricultural when it was first entered. He has been on this land twenty-five years and probably twenty per cent of it was really available for settlement in its original state. He has cleared at the heavy cost mentioned by him in the last few years by using powder, probably about 10 or 12 acres. He does not think there is any more economical method known to the people here by which this heavily timbered land can be cleared and made susceptible to cultivation. That is the cheapest way that he had ever tried. He does not believe that there is ten per cent of the unsold lands of the Company in Tillamook County within the limits of these grants that would be available for agricultural purposes,

and there is none of it that would be suitable for agricultural purposes without the timber being removed. The soil of these lands is a coarse clay and shot soil. The unsold lands of the Company in Yamhill County with which he is familiar is the same as in Washington County and chiefly valuable for the timber. There would be about fifteen to twenty per cent of the total unsold lands of the Company in Yamhill County that would be available for agricultural purposes, including such lands as might be available if the timber was removed. There would not be any portion of these lands in Yamhill County with which he is acquainted that would be available or useful for agricultural purposes without some clearing or something like that, that would not pay for the cost of cultivating it. The soil of these lands in Yamhill County is coarse clay and shot soil and rocky, a great deal of it is very rocky. These unsold lands in Washington, Yamhill and Tillamook Counties are all in the Coast Range excepting these lands east of Forest Grove in 1, 2 and 3 west, which would be in the foothills and hills of the Willamette Valley. Beginning at 1 south, 4 west, from there on is all in the Coast Range of mountains. The lands in Columbia County through which he passed, with which he is acquainted are generally heavily timbered. He would not say there was over fifteen or twenty per cent of these lands that would be available for any agricultural purpose with the timber removed and without the timber removed there would not be any.

Whereupon witness testified as follows :

Q. Well, isn't it true, Mr. Scott, that here and there throughout this grant, in the low little valleys and ravines and draws leading down to the larger streams, there is here and there a spot where a house could be built, that is level, with a half-acre in a place, that you could get a garden, plant a few potatoes, sow a few oats, and make a pretense of a home, and settle on this land?

A. Yes, sir.

Q. Well, what would the balance of the settlement be good for?

A. It wouldn't be good for anything. A man would starve to death on a settlement like that.

Q. Well, where these quarters were timbered, and a man could find half an acre where he could build his cabin or his house, put out a garden of a half-acre in potatoes and things of that kind, couldn't he make a living by getting the timber?

A. Yes, if he could sell the timber for the price it is worth nowadays, he probably could live off the sale of the timber. He certainly wouldn't live off what he would produce from the soil anyway.

Q. Then such claims on such tracts, if I understand you, would be chiefly valuable for the timber?

A. Yes, sir. There is another thing now I think of it. Take those bottoms you speak of along the rivers, out in this Coast Range of mountains, a great deal of that is the poorest land there is out there.

Q. How does that happen?

A. It is beds of gravel; the formation is steep, and the rivers and streams are very rapid, and the alluvial loam has washed away. You can see that upon the Willamette and Columbia rivers here—it has washed away, and lodged down on the low ground and flats.

Q. Then, as I understand you, within the limits of these railroad lands, the level bottoms are very small?

A. Yes, sir, just little places along the canyons.

Whereupon on cross-examination witness testified that he has not lived on his ranch for twenty-five years but has lived in Washington County that long and has been in that county all the time excepting three years when he was in California. He has lived on his ranch and in the town of Forest Grove, moving to Forest Grove five years ago and living there ever since, but he farms his place, going back and forth almost every day when not doing something else. He has cruised for a great many people or for his own purpose for the purpose of selling timber and has cruised for the Hammond Lumber Company and Louis Blaumauer who is now dead. Blumauer owned some timber land, some 1600 acres out there. Witness cruised for a great many people who did not even own timber, who wanted him to look at a piece of timber they wanted to buy, and cruised for lots of others he could not name. He was employed by the Oregon and California Railroad Company about twenty-two or twenty-three years ago when it started in to examine its land, could not tell the man

with whom he cruised the timber and who took him through these lands in Washington County and showed him in a general way the section corners or lines and trails and packed some for him. This was in Washington County south of the base line and in Yamhill and Tillamook Counties. He has never been employed by the Company in any other capacity since that time. He never cruised any lands in 2 and 3 north in ranges 2 and 3 west, but went through and looked over that in a general way. His object in going through it was to see what the timber and country were like and how much Government land there was, that was good timber and all that kind of thing. At different times he went to look at pieces of land for other parties, people who wanted to sell out or something of that kind and he would go and look at it. In some cases he ran section lines of the Company's lands in this locality. In running a section line there would be a railroad section on one side and Government land on the other, and his knowledge of these lands is of a very general character. He only made an examination of the Railroad Company's lands in Washington and Tillamook Counties in township 1 south, ranges 4, 5, 6, 7 and 8 west when running the section lines out looking at the Government land and would also see a great deal of the railroad land, quite a lot of that he would have to run through and look the lands over. In fact he looked over quite a lot of that for the A. B. Hammond people and made a personal inspection of a great deal of that land. He inspected a lot of that country before it was surveyed and located a great many

people on the lands there before it was surveyed and built cabins and a big part of those trails through there he built and helped to build. At the time they first went in there they supposed that the Government would get all the land and in there on the unsurveyed part and so they looked over that just the same as they did the Government part of the land. He first started into that country twenty-five years ago and a little farther south of there he was in thirty-five years ago. He has been along in that Coast Range in that country, cruised timber and land, hunted and prospected that country more or less in the last thirty-five years, outside of the three years he was in California. This railroad land has been withdrawn from entry ever since he has been in that country. He had a good many other occasions besides that referred to for the Hammond Company, to make special inspection of the Railroad Company's lands. He bought some of the Railroad Company's lands himself situated in township 1 south, range 5 west near his ranch. None of his ranch was obtained from the railroad land, but all from the Government, part of it was in odd sections but was taken before the railroad came through. He has been engaged in locating people on homesteads in that section of the country and has located people on the even numbered sections within the limits of this land grant, and he has filed and perfected a homestead entry on the northeast quarter of section 22, township 1 south, range 5 west, right north of Sheridan, it was 5 south and 6 west he believes, but does not know if he can tell the section without looking it up. There are a great many

times that he looked at these lands with reference to the soil and all the conditions connected with the lands, logging and soil and streams, climate and all that kind of thing, but his principal knowledge concerning these lands was obtained while he was cruising the timber. He could not find out anything about the land without he was out in there. There was no other way that he knew of. He lived seven years on his homestead in 1 south, 5 west in section 22 and two different winters they were there the snow was five feet deep in his yard, so he knows pretty well about that. He used to go out and shovel snow off of some of the cabins out there, where the people were not there, six and seven feet deep and had a pretty good way of knowing about what that was. Portions of this land of the Railroad Company is very heavily timbered and has a good market value, good quality of timber. The money a person would receive for his timber would help some in paying for the clearing of the land. The value of the timber would not largely pay for the cost of clearing the land. He has 160 acres of timber land himself in 2 south, 5 west and the best offer he ever had for it was $3500 and he does not think one could clear that land for $200 an acre. He would not take the contract to do it at any less than that. Clearing land in these mountains is a little different from what it is down in the valley where a man can get at everything and where everything is accessible, good roads and railroads. One has to transport all his powder and material and build a wagon road in there. It would cost $10,000 to build a road to it.

Whereupon on re-direct examination witness testified that he filed on his homestead on the northeast quarter of section 22, township 1 south, range 5 west, twenty-five years ago last spring. The land is steep and broken and rough and chiefly valuable for its timber. He lived on it seven years and stayed there two years after making final proof. He did not make it his home because he could not make a living on it and if he had not been cruising timber and one thing and another like that, he would have starved to death on it. He first took it up as a pre-emption and when the time was drawing near for proving up, paying $400.00 the Secretary of the Interior allowed him to take that as a homestead, to relinquish his pre-emption filing and take it as a homestead, although he had had a homestead once before, he allowed him to perfect title to it, which he did and that was his salvation. He was no nearer having the $400.00 when near the end of that time, when the 33 months was almost up than he was when he went there. He used to go and work out, grub stumps for the neighbors there for a dollar a day, as good a wage as he got at that time, and buy bacon and flour and take it back to his family. At the end of the week when he came home they had everything eaten up he took there the week before and he could not say that he was getting any farther ahead. When this timber excitement came up, people came in taking up timber, he knew all the country, all about it, all the lands, etc. Then he started in on that and his place was a kind of stopping place and they stayed there as long as that went on. That was all he made out of

that. When he went there timber had no market value. He went and homesteaded because he did not know any better. He wanted a piece of land and had to have it. These homestead settlers in that general vicinity all abandoned their claims practically every one of them and the lands were re-entered and taken up under the timber and stone act. He located people on both. Most of them were at first homesteaders and then when they saw they could not live on the land and comply with the law they either abandoned them or relinquished to other people and they took them up under the timber and stone act. These lands were finally nearly all bought up by different timber companies. The timber is all they were any good for. He bought some railroad land from the Company somewhere about eight or nine years ago in the same vicinity, he thinks about 300 acres altogether first and last. Some of these lands he sold under his contract with the Railroad Company but it was all paid out. He assigned his contract to others. The land was chiefly timber. He does not own any of it now. Different parties own it. One man by the name of Longren owns part and another man in Spokane, Munson, owns a piece of it and it is owned by people who are holding it for the timber values. His knowledge of these lands that he did not specifically cruise is sufficient to enable him to tell the character of the land as to soil and timber and other possibilities. He can tell exactly what the condition is just as he has, and knows absolutely what he is talking about.

Whereupon on re-cross examination witness testified

as follows:

Q. You never have made an examination of these railroad lands?

A. Quite a good many of them I have.

Q. Wait till I finish the question, Mr. Scott.

A. Yes.

Q. For the purpose of determining whether 160 acres of land could be obtained in contiguous bodies, not by legal subdivision, that would furnish a sufficient amount of agricultural or tillable land for a man to make a living on? I don't mean that he could make money on, but that he could make a living on, supply himself and family with the necessities of life?

A. Yes, sir, I did. I looked for my own personal benefit, for I wanted a piece of land just like that. I went onto the Nestucca country 34 years ago this summer, and went down there and looked at a piece of a section of railroad land at that time, for that purpose, and looked it all over, and looked that country thoroughly to see if I could find a piece of bottom land, or something of that kind, that was suitable for making a home; and I spent a good deal of time in there at that time. I lived then north of Sheridan.

Q. You don't mean to testify, however, Mr. Scott, that you have made such an examination as I have described in my question previously asked you, with reference to all of these lands that you have testified concerning, some of which you have testified that you never

cruised, that you merely had passed through and made some casual examination of?

A. Well, now, I will answer you in this way: I have went all over that land, and all through all that country, and looked for just those things, just exactly like what you are talking about now; and I remember the nearest of anything that I found of that kind was a piece of land in Section 5, Township 2 South and 5 West; and I think a woman here of the name of Mrs. Badgley, right here in town, owns the piece of land now; and that was in a railroad section, and was supposed to be railroad land. Now, I will show you how thoroughly I looked out and hunted it up; and from the fact that nobody seemed to take it up, and the railroad people would not offer to sell it, I went farther, and had an attorney to look it up, and looked the thing up and found that this land had been filed on prior to the time of the railroad grant, and had been abandoned. And I got that—got a party to take that as a homestead. Now, that lay in a "T" shape there, and there was a kind of a swale. There is some of this what we call alder flat land, and it was the best piece of agricultural land that I knew of. It was just kind of a little strip—little spring branches run down, this kind of black alder land; and they took that then as a homestead.

Q. That was on an even section?

A. That was on an odd numbered section. Section 5, 2 South, 5 West. It had been picked out—I forget now—sometime about '62 or '63. That is the best of my

recollection. I think this railroad grant was about 1865, wasn't it?

Mr. Fenton: One was 1866 and the other was 1870.

A. Well, it was prior to that time anyhow; and this former entryman had picked this out as being the best piece of land that he probably could find in there, and I done the same thing. I was looking for something of that kind.

Q. You don't remember the description of that land, do you?

A. Yes, sir, I do.

Q. What is that?

A. It was the north—it was "T" shaped, now—I might make a mistake in it; it is section 5.

Q. What township and range?

A. 2 South, 5 West, section 5. It is right at the quarter post anyhow. I think it was the north half of the northeast quarter and the southwest of the northeast quarter, and it might possibly have been the Northwest of the Northeast and the Northeast of the Northwest, and then a row of forties run south of that. That is the way that stream ran in there. I wouldn't be just positive now, off hand.

Whereupon GEORGE W. JONES, called as a witness on behalf of defendants, being first duly sworn, testified, that he resides at McMinnville, Yamhill County, Oregon, is at present County Clerk, and has resided

in that county for forty-seven years. He will have been County Clerk, at the close of this term, eight and a half years, before that he was in the lumber and sash and door business. His first sawmill was on Panther Creek, in Yamhill County. In 1876 he purchased 320 acres of land of the Oregon and California Railroad Company in Section 9, Township 3 South, Range 6 West, and operated there ten years, and removed to Section 3, Township 3 South, Range 6 West, and operated there fourteen years. The first mill on Panther Creek was about eight miles and the other two about seventeen miles from McMinnville. His first purchase, including the railroad and non-railroad land was 320 acres. After that he purchased the north half of the Northeast quarter of Section 3, Township 3 South, Range 6 West, that is, after he moved the mill. He made his first purchase from private individuals on Panther Creek. He is conversant only with the lands of the company located in Townships 2 and 3 South, Range 6 West, and probably one tier of sections in the west of Township 2 South, Range 5 West, and Township 2 South, Range 6 West. While he has been on and hunted over some of the lands in 4 South, 6 West, he is not so conversant with them and would not wish to testify as to anything but what he absolutely knows. He has ranged these mountains a great deal, but is only conversant with these two townships, and wishes his testimony to be confined principally to them. The general character of those lands, referring to the country, is very abrupt, cut into deep ravines and gullies. He supposes the highest elevation would be

about 2,000 feet. His first mill was located at 1,200 feet above sea level; his second one not so high. The general character of these lands with the exceptions of now and then an isolated swale or tract that he has knowledge of, is not agricultural, is wholly fit only for the timber. For the time that he ran his mill, for twenty-four years, he didn't even raise vegetables, it was cheaper to buy and haul them in than to raise them. He does not think that five per cent of these lands, with which he is acquainted, could be used for agricultural purposes. To all of which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be deemed taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon, witness testified, that only those few tracts that he speaks of, that had been taken years ago, in a state of nature could be used for agricultural purposes. He cites one taken by Mr. Carr in Section 12, Township 3 South, Range 6 West; he refers to lands heretofore sold and taken; of what is remaining, he does not know of any that could be used for agricultural purposes. The land is what is termed "shot land." It is a kind of rocky formation. In fact the rocks are almost to the surface of the ground. There is very little soil. After the timber is removed some grasses grow there; it could be used for stock raising, but the principal growth is what is called salal and Oregon grape—not very much value. Nothing will grow where the grapes

and salal are, but where there is no salal and grape, after the timber is removed there is a species of grass that will grow there that will furnish very good summer grazing; but owing to the deep snows in winter, a man would be compelled to have some place to take his cattle. He could not maintain them in that range. He has no knowledge of the cost of clearing this heavily timbered land, but knows that it would cost enormously. There are several kinds of trees in that section. In Township 2 South, 6 West, the principal growth is yellow fir, with a considerable amount of hemlock, and what is termed here by the people "larch." He knows of the burned area within the limits of this grant, west of McMinnville, what is called "the Meadows." Those tracts of land that were taken along above Meadow Lake, on what is called Walker Creek were taken years ago principally for the dead cedar timber, that was burned, that could be worked up into shingles, posts, etc., and shipped out. There was one or two beaver dams in there, but he has never known them to cultivate them at all. The soil of this burned area, he considered unfit for agricultural purposes, except where it was in a swale, an ash swale or something of that kind, where it is beaver dam, or something of that kind, where it has deposits. That would be a small, not a large area. Some of these even sections within the limits of this grant, these railroad lands, most of them he knows of, have been abandoned since they removed the cedar timber. Some of them have been sold. One does not find many of that class where the timber is not removed, except on Walker

Creek, in Section 12—3 South, 6 West, taken by Mr. Carr. He sold to some other party. There are very few of these settlers left on the lands in the even sections; after removing the cedar timber and taking from them what they could to make a living, they have abandoned them, or disposed of them. There is a very small amount of that class of land in these two townships. In going over the head waters of the Trask in his fishing and hunting trips, within the limits of this grant, as far as he saw, he considered both the even and odd sections about the same nature as those of Townships 2 and 3 South, Range 6 West, except they are more precipitous and more rugged. The timber was all he could see any value for. The mountains lying along where the elevation is in some instances 2,000 feet above sea level, and are called the Coast Range. They are very nearly parallel with the Pacific Ocean. It is a continuous mountain range from the Columbia River to the California State line, and thence on down. Whereupon, on cross examination, witness testified, that he has been engaged in the milling business and in the manufacture of products of timber since his residence in Oregon, and his acquaintance with land has been as a timber man. He owned no lands in 2 South, 6 West, but his lands adjoined. He has been in 3 South, 6 West, and has been through a great portion of 2 South, 6 West; has hunted and fished over most of it. Has a general knowledge of, but never cruished the timber, or ran the lines of these townships, and has a general knowledge from traveling through the country, hunting and fishing. He located a timber claim

in 2 South, 6 West, but never perfected his title to it; he let it go, but he wishes he had. He has purchased from the Railroad Company, in all, 600 acres. The first purchase he made was in 1876 and he paid $1.25 an acre for the first 400 acres. The second purchase he paid $3.00 an acre. He afterwards paid $5.00 an acre for the north half of the northeast quarter of Section 8, Township 2 South, Range 6 West. This Meadow Burn that he speaks of—he does not know, but he supposes they were burned—there is no evidence of very much timber ever have been on it. It is a meadow three quarters of a mile long and averaging an eighth of a mile wide, now covered by a lake that is located in Sections 8 and 16, Township 3 South, Range 6 West, a half mile west from his mill, right down to the lake. He is not now engaged in the lumber industry. He never attempted to raise anything on any of his lands, and never attempted to clear them, or produce any products from the soil.

Whereupon J. D. ZURCHER, called as a witness on behalf of defendants being duly sworn testified that he is thirty-three years old, an abstractor and engaged in buying and selling timber lands. He resides at Roseburg, Oregon, and has resided there five years. During that time he has been engaged in the business of abstracting and buying and selling timber lands. The name of his Company is the Commercial Abstract Company. "Defendants' Exhibit 312" was prepared from abstract records in his office and correctly represents the ownership of land as shown by the deed records of Douglas

County. The abstract records in his office are built up from records in the Court House of Douglas County, that is from the records in the office of the Recorder of Conveyances. His records are also based on the Land Office records. What the deed records do not show they search the Land Office Records for additional information and he is able to say that he has verified the sources of information with the official records and traced the same or reproduced the same upon this map.

Whereupon Defendants offered this exhibit in evidence marked "Defendants' Exhibit 312" to which complainant objected as incompetent, irrelevant and immaterial and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof.

Whereupon said exhibit was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidenc and identified herein as "Defendants' Exhibit 312."

Whereupon witness testified that "Defendants' Exhibit 312" is a map of Douglas and Coos Counties as prepared from the plats on file in the United States Land Office and on that he has painted the lands owned by the Oregon and California Railroad Company, C. A. Smith Timber Company, the Neenah-Oregon Land Company, the Roach Timber Company, Kendall Brothers, Pillsbury Lumber Company, Lennan Land Com-

pany, the Bradford-Culver Timber Company, the Myrtle Lumber Company, the Gardiner Mill Company, Weyerhaeuser Land Company, A. H. Hinkson, and Sparrow, Coach & Kroll, in different colors. This legend on the left hand side of the map shows these respective land holdings and the colors are shown in a small square. The light or pale green colors represent the unsold lands of the Oregon and California Railroad Company in Douglas County. There are none of these lands shown in Coos County. The dividing line between Douglass and Coos Counties is the dotted line through the map and his records do not show any of the unsold lands of the Company in Coos County and so far as the map shows the timber lands of these other people and the unsold lands of the Company it is confined to Douglas County alone with the exception of one or two places where the line crosses over which would make it lay in Lane County and in Josephine County and Jackson County, just on the border. He has been over practically all of Douglas County through the mountains and they have in their office cruises of timber of practically all of Douglas County and he has ascertained by personal inspection the timber character of these lands. They buy and sell timber lands, and it is necessary for them to inspect a great deal of this timber in buying it and he has done that personally. He has traveled over and through this grant, the unsold portion of it, and is acquainted with what is called merchantable timber. He does not know or cannot say as a cruiser how timber cruisings are made nor has he ever made any cruisings as

a timber cruiser. He knows how that work is done from his knowledge of how timber is cruised. It depends upon what kind of a cruise one wants to make. They will go through and measure a tree, the heighth of it and count the number of trees to the acre. It is estimated as a rule that way. Of course a man may go out and walk through the timber and guess at it and make a cruise that way, but they measure the heighth of the trees. There are several different methods by which one can measure the heighth of a tree. A man becomes familiar after years of practice of estimating the heighth of a tree. One does not take a tape line.

Whereupon witness testified.

Q. Now, assuming that this timber on certain parts of it stands upon soil that, when the timber was removed, it might have some agricultural value, or some value for grasses or fruit or grazing purposes, or other agricultural or horticultural uses, about what per cent could be made available for such argicultural or horticultural purposes when the timber was removed, in your judgment?

A. Oh, I should suppose it would average 15 or 20 per cent.

Whereupon witness testified that he could not say exactly what it would cost to remove this timber and clear the stumps and roots and make it available for use in agricultural pursuits, but should estimate that it would run all the way from $100 to $300 or $400 an acre to cut that timber off and clear it.

Whereupon witness testified.

Q. What is the character of the soil of this land that you would speak of as being cleared, or subject to clearing, this fifteen to twenty per cent that might be made available for some agricultural purposes? What would be the character of that soil in the majority of the grant?

A. Well, that is generally first-bench land, and the soil is fairly good, because it is on the best soil where the best timber grows.

Whereupon witness testified that the land that was first settled in Douglas County was upon the Creek bottoms, open land. The best soil in the county at that time was taken up under the Donation law and these lands were in the valleys. Drain is on the main line and there is a surveyed projected road on Elk Creek. There was some land originally granted to the Railroad Company along the line of the railroad between Elk Creek and Roseburg but practically all of that land has been sold by the company to settlers, that is, such of it as the company ever obtained title to. This road was not built until about 1878 and the country was settled up in 1850 or thereabouts and as a result most of this land was acquired under the Donation and homestead laws and cash entries. The unsold land in the vacant places shown on this map outside of the solid blocks, or the checker board lands, are nearly all barren, rocky points, and have not very much value of any kind. A settler might make a home in there but he would not make a living. This land that is left there would be suitable for goat pasture in the

spring when the grass was a little green, what little grass grows there. The checker board shown by this map in color shows the lands of the Oregon and California Railroad Company in light green. He thinks that that map practically defines the timber land both east and west of the railroad as to the main body of the land; where this main body begins is about the line of the timber land, it is probably varied a little in places. The southern part of that map shown in shape of checker board form, indicates all timber land down through there, pointing to the green squares as shown on the lower half of it. He would say that about seventy per cent of the unsold land of the Company in Douglas County was merchantable timber land, that would leave about thirty per cent of that land that would be practically worthless, the soil being rocky and unfit for cultivation of any kind. The country is all very rough. The Gardiner Mill Company he believes is the only Company at the present time of those shown on the map that are manufacturing lumber out of their holdings in Douglass County. The Neenah-Oregon Land Company is a Wisconsin corporation and he thinks also the C. A. Smith Company. Kendall Brothers is a partnership of Pittsburg, Pa., Pillsbury Lumber Company he presumes is a Minneapolis concern. The Lennan Land Company he thinks is an Oregon corporation with offices in Minneapolis. The Bradford-Culver Timber Company is a Wisconsin corporation. The Myrtle Lumber Company is an Oregon corporation, but the principal stockholders are the Lovejoys who are eastern people. The Gardiner Mill Com-

pany is an Oregon corporation whose principal stockholders are California people. The Weyerhauser Land Company represents the Weyerhauser interests and everyone knows who they are, not a resident, but a foreign corporation. A. H. Hinkson lives at Eugene, Oregon. Sparrow, Coach & Kroll he believes is an eastern company. The C. A. Smith Company is not manufacturing any lumber from its Douglas County holdings, but it has holdings also in Coos County and a mill at Marshfield. With the exception of the Gardiner Mill Company, none of these large holdings are being utilized for the manufacture of lumber or any other useful purpose. These timber lands of these various Companies other than the Oregon and California Railroad Company in his judgment, are the best timber lands in Douglas County. He is acquainted with the stumpage or number of thousand feet on a forty on some of these lands. Township 26 south, range 9 west, is very heavily timbered. The land in section 14, township 26 south, range 9 west is owned by the C. A. Smith Company and will run 16,000,000 feet of timber to the 160 acres. West of the railroad in Douglas County in the Coast mountains the land is reckoned among the best timber in the State of Oregon. On the east it is not so good. With the exception of the Gardiner Mill Company of which he can speak positively and the exception of the Neenah-Oregon Land Company, all this timber was bought about five years ago by these Companies, that of the Neenah-Oregon Land Company has been purchased within the last two years. This map shows all the

streams, all the roads, all the donation land claims taken up under the donation land law, the principal towns and postoffices in the County. It does not show the mountains but that is shown by the topography of the map.

Whereupon on cross examination witness testified that he was in the mountains every summer with the timber cruisers when they go out but he is not a timber cruiser. He is an office man and has a working knowledge of timber which he obtained while in the employ of different companies and while working for himself. He was in the employ of the Southern Pacific Company for about two years. His principal knowledge concerning these lands was not gained while so employed. He had four or five times as much experience in timber lands since he left the Southern Pacific Company than he had before that time. While employed by the Southern Pacific Company he did work with reference to these lands both in the field and office, investigating the matter of squatters upon the land and reporting upon the kind of land that it was. He would examine and report on the character of the land, also on the people who had settled on the same. His work was all over the State, but the principal part of it was in Douglas and Jackson Counties. He was in the employ of the Company during the years 1905 and 1906. In 1907 he entered the employ of Frank E. Alley who was engaged in the abstract business and witness was in business for himself at the present time. "Defendants' Exhibit 312" while showing Douglas and Coos Counties, the color-

ings and work of witness on this map was confined to Douglas County. He was raised on a farm in Eastern Oregon and Ohio, but had never farmed in a timbered country such as this. He is acquainted with the possibilities of the soil by observation. He knew of no sales of logged off land in Douglas County, unless it would be down on the Coast. His knowledge concerning the settlement of this land was obtained from the records. His knowledge about the conditions and settlements of the land about 1850 he obtained from the Land Office records. He could tell when settlements and filings were first made upon the land by the records in the land office. In the entries under the Donation Law the applicant states when he first settled on the land and that is what he formed his opinion from. There are several small companies operating in Douglas County that are not shown on "Defendants' Exhibit 312." He obtained his knowledge as to the residence of the corporations mentioned by him from the records in the Clerk's office and personal correspondence with the people. He does business with quite a number of these corporations. He bases his knowledge as to the amount of this land that is valuable for cultivation or could be rendered agricultural land from his own observation. Somebody else might disagree with him on that. There is probably a little land along creeks in sections 1, 5 and 7, township 32 south, range 4 west that could be cultivated. In township 29 south, range 5 west there is not much agricultural land in the township except in sections 30 and 31 and a little in 33 and 35, but he could not state posi-

tively as to the last two mentioned sections. In township 30 south, range 5 west, there is some very fine land, but not unsold railroad lands. Referring to township 30 south, range 5 west, the agricultural land follows the river up to about the southeast corner of section 9, then begins to narrow up into the canyon, closes in and opens out above in three or four places and then it is a narrow canyon all the way up. There is no agricultural land in the unsold railroad lands in township 31 south, range 6 west, but he cannot tell exactly whether there is any land of this character in section 29. He speaks as to a whole township. There is very little agricultural land in that township. In 23 south, 6 west there is some fairly good land along the creek but this land is all heavily timbered. The same conditions exist in township 24 south, range 6 west. The land in there as a rule is pretty fair down in the southern part of the township. This land is close to Oakland. In township 24 south, range 6 west, through which he had marked the Umpqua River as running he would say that it was very rough. The river runs through a deep canyon and that country is all very rough through that whole township, odd and even sections. There are a few farms but not very many. There is some farming land in this township. In his judgment not more than one-tenth of one per cent—five or six hundred acres—out of the total of 616,843 acres in Douglas County is in its present condition suited for agriculture.

Whereupon on re-direct examination witness testified that the settlers referred to on this unsold railroad

lands they called squatters who go out and build a little cabin, clear a little place for a little garden, some of them would and some of them would not do that and start in to making posts, cutting and selling wood. In no case that he investigated had the so-called settler made any offer to the Railroad Company to purchase the land. They were trespassers. In his experience these cases were few and were in Douglas and Jackson Counties. There had been a number of homestead entries relinquished and a timber and stone filing made on the land. As far as he knew, cabins and improvements of homestead entrymen on the even sections within the limits of the grant had all been abandoned as soon as title was perfected and the title passed to timber companies, especially in a certain section. These lands that were homesteaded and subsequently entered under the timber and stone act in even sections, were all timber lands.

Whereupon witness testified.

Q. Well, then, if I understand you, Mr. Zurcher, there are not very many settlers within the limits of this grant, on the even sections, at the present time?

Objected to as leading.

A. There are not. Take practically all this territory in through here (pointing to the southeast part of the map), and all you will find is an occasional bachelor's cabin. Once in a while you will find a man with a family on a little creek. You won't find any farming country in there at all.

Q. These cabins that you refer to on these home-

steads, what were they? What kind of structures or homes were they?

A. Log cabins.

Q. Are they inhabited at this time?

A. Some of them are, as I say—an occasional one.

Q. Well, those that are abandoned are not inhabited, are they?

A. No, sir.

Q. These that are inhabited, along what streams are they?

Q. Where are these people's claims or settlements with reference to streams and little valleys, if there are any?

A. Well, you will find some along the South Fork of the Umpqua River, up on Cow Creek, and up on the West Fork of Cow Creek, on Camas, and a few up on Rock Creek.

Q. State to the court the extent of the agricultural lands, if any, along those creeks, that are within the limits and still belong to the Oregon and California Railroad Company. Is there any of it?

A. There is very little, except, as I say, along the creek bottom, there would be a little land that might be susceptible to cultivation after clearing it.

Q. How large a spot, we will say to a forty, or to a quarter section, where there would be a chance for a man to make a clearing and to put a house, on any of

this land that is unsold belonging to the railroad company?

A. Well, I would say that a ten-acre tract would be a large one.

Q. And what would be the character of the balance of the land?

A. It would be hilly and covered with timber.

Q. You have taken into consideration all these facts in making your estimate of percentages, have you?

A. Yes, sir.

Whereupon witness testified that his knowledge, concerning the homestead, timber and stone and other public land entries on the even sections within the limits of this grant in Douglas County, was obtained from the Land Office Records as to what the notices are, and from traveling through the country all over Douglas County. He found that in the even sections, which were the only sections that could be entered, he would find a timber claim entered and a homestead entered, for instance one would go out and take up a timber claim and contiguous to it would take up a homestead, live on it there until he would commute it and either hold it for investment or sell it to some timber company. The lands obtained through a majority of these entries have been sold to timber holding companies. This country is all rough, broken land, heavily timbered.

Whereupon upon cross examination witness testified that not all of his information with reference to the set-

tlers on even numbered sections was obtained while in the services of the Oregon and California Railroad Company and engaged in ejecting settlers from the lands in Douglas County, but that is where he received his first information.

Whereupon upon re-direct examination witness testified that he was employed by the Oregon and California Railroad Company, and not by the Southern Pacific Company.

Whereupon C. H. STEWART called as a witness on behalf of defendants being duly sworn testified that he is sixty years old and is manager of the Commercial Club at Albany and came to Linn County in 1865, and was County Clerk of that County from 1882 to 1884 and County Judge from 1904 to 1908. After the close of his term as clerk in 1884, he went into the hardware and implement business and remained in that business until about 1902. He was in the real estate business for one year prior to the time he came to the management of the Commercial Club of Albany. The name of his firm was Steel & Company, that was in 1902 or 1903, not very largely outside of the city. He was County Clerk two years and as such ex-officio a member of the Board of Equalization for Linn County, and was County Judge four years and as such a member of that board. He is to some extent acquainted with the unsold lands of the Oregon and California Railroad Company in Linn County. He has lived in Albany and in Linn County during all the time he has been in Oregon and he has, if he remembers correctly, been through 1 and 2 east considera-

ble, hunting and fishing and several times in looking at the general character of most of the land in 1, 2 and 3 east for the purpose of taxation. He has been through considerable of ranges 1 and 2, townships 9, 10, 11 and 12, and in that section in the south part of the county in township 15, he thinks that runs to 1 west. He has been over that part of the lands considerable at one time. In the north part of the county he was there several times hunting and fishing, but while he was County Judge he went through townships 9, 10, 11 and 12, ranges 1 and 2 east and down in township 15, probably 1 west and 1 and 2 east, for the purpose of taxation, and he thinks his knowledge would enable him to testify in a general way as to the timber or general character of these lands, at least they determined the valuation of the lands for taxation purposes on account of it. To which testimony complainant objected as incompetent, irrelevant and immaterial and it was agreed that this same objection should be deemed taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon, and public land entries thereof.

Whereupon witness testified that he supposes that half of the unsold lands of the Company would be cultivated, provided they were cleared, the other half is somewhat rocky and broken, so hilly that it would hardly be susceptible of cultivation. They taxed that half that could be utilized for agricultural purposes if cleared of the timber, at about one-half of the value of the other holdings of private companies; this that was so taxed was

timbered, but the character of the timber was not so good. It had been culled by previous purchases. That part of these lands that are covered with timber would be so expensive to clear that it would be almost prohibitive. He would say that it would cost from $150 to $200 an acre to clear. The chief element of value of these timber lands would be the timber. The yellow field on "Defendants' Exhibit 259" beginning at the towns of Cottage Grove or Eugene and extending north towards Houlton beyond Portland, with Salem, the capital, about the center and a little farther south and a little west of south, with the town of Albany in the apparent center at the widest portion, represents the Willamette Valley in Western Oregon. North of this land shown on that yellow field with Corvallis and Albany near the center extending from the east boundary of the indemnity limits of this grant and the west boundary of the indemnity limits of this grant towards Yaquina Bay, was taken under settlement laws prior to the appropriation of these lands by the Railroad Company. There is very little soil on these unsold lands in Linn County; which he has testified are rocky, precipitous and hilly. Probably on the south side of these mountains where it is very rocky and where the winter rains have washed the soil entirely off, it is not susceptible for cultivation at all. The foothills where these unsold lands in Linn County are found, are simply called the foot-hills of the Willamette Valley, or Cascade Mountains. The Cascade Range runs parallel nearly with the Willamette Valley on the east side and runs north and south.

Whereupon on cross examination witness testified that he is manager and secretary of the Albany Commercial Club; has lived in Albany since 1865 and until 1882; was connected with a newspaper, from the time he left school in 1867 and was County Clerk from 1882 until 1884 and from 1884 to 1904 he was in the hardware and implement business and County Judge from 1904 to 1908, and since that time he has not done anything excepting that for a year and a half he has been secretary of the Commercial Club. He has never been a farmer or engaged in farming, but has been very close to that business, selling implements all over that country. He does not own any land in that country but had owned one piece inside of these holdings in 11 south, 1 west, but has forgotten the section. It was partly good agricultural land, the agricultural part was very good. Practically all of these railroad lands in Linn County are rolling. Ranges 1 and 2 east are not in a mountainous country, they do not extend up to the Cascades proper, 3 would get up into the mountains. There are a number of ranches south of that place. He is acquainted with the Maley ranch, the old Thompson ranch, the Hiram Billings place. This railroad land is more broken than these places. These ranches are along close to the Santiam Valley. When one gets back on the ridges, it is very broken and rugged and sometimes rocky. The railroad lands are relatively in the same position as these ranches. The railroad lands are south of them. Counsel for the Government has picked out some pretty good places there mentioned by him. There are other places

right by the side of those, or very close to them, that are very bad, a great many abandoned right there. One will find settlers running away up as far as 4 east and following up these valleys that break out of the mountains. The good land runs back following the valleys and people are living there, making their homes with their families, but not on the ridges; they would be in the valleys. Stemgrant, the son-in-law of Billings, has a ranch that is in the valley, part of it runs down on the creek bottom and it is rolling land. A great deal of this land in township south 13 and 14 was timber land at the time it was entered, as shown by present indications and surroundings and has been cleared off and made good ranches of. He thinks that fifty per cent of these railroad lands in Linn County would be susceptible of cultivation if it was cleared of timber.

Whereupon witness testified :

Q. Well, now, Mr. Stewart, in your opinion, don't you think that it would pay to clear that land and make homes there. If these early settlers could go onto that land and clear it when they couldn't sell their timber—there was no market for their timber, it was valueless—wouldn't that timber assist in paying, if not entirely pay the expense at the present day?

A. Where those settlements have been made, it is where they have found some clear land. The land that they have in cultivation has not all been cleared off. It has not been cut right out of the virgin forest. They have taken advantage of clearings, and, of course, cut off some

timber, too, in those creek bottoms. They cut that and slashed it, and that has been cleared off.

Q. There has been considerable land cut off and cleared in that country solely for the purpose of marketing the timber?

A. Yes. They have gone on the hills—some people have gone in there. I remember in 1882, when I was clerk, there was a small colony came in there, and something like eight or ten of them took claims up there. Homesteads. Several of them abandoned those claims, and came down in the valleys and rented land, and now own good farms down there. The other men are up there grubbing yet, and they never will get through.

Q. That is your opinion in the matter? You never farmed?

A. I have been very close to the farmer, because I sold him what he did his work with, all of his implements.

Q. But you have never engaged in the industry?

A. No, not very largely. I have hired some of it done. It doesn't pay.

Q. You feel that it doesn't pay to clear land in order to cultivate it?

A. Oh, no; no, life is too short for that.

Whereupon witness testified that up in his part of the country he does not think there is as much cleared land as there was forty years ago. He does not mean

that he thinks that the people are leaving their lands that they have cleared, but that the new growth of oak and fir is coming up a great deal faster than it is being cleared. Up to that time it was nearly clear. The settlements have increased in this country. Not very many entries of Government land or homesteads have been taken up throughout the foothills and mountains—that was nearly all taken up before the railroad grant, most of it, but since, there have been some entries of Government lands along in favored places. Speaking of donation claims, homesteads and pre-emptions, he knows that in 1882 to 1884 when he was in there, the business was all done before him and there were very few of these entries. They came to him as County Clerk to execute their papers because it saved them the trouble of going either to Roseburg or Oregon City, that was in 1882 to 1884. Whenever they clear off this land it is good for grazing purpose. It is good grazing and the land itself is rich. Wherever it is cleared of brush or timber, it would be splendid grazing land. The undergrowth is very thick on the west slope of the Cascades. They raise considerable fruit around Albany and nearly all of these railroad lands would be good fruit land. It is not sold at high prices as fruit land, as it is at Hood River and Medford. If these lands were cleared off, it would be as good fruit land as Hood River or anywhere else. The fruit land in the grubs runs from $20 to $50 an acre in his county, but they also raise goats in Linn County and this land in the foothills of the mountains would be fine grazing. A very small portion of this land is suscepti-

ble to cultivation in its present state. He has passed through these unsold lands concerning which he has testified, and something like he supposes half a dozen times at different places, out on road business and then at that time in 1904 they were beginning to raise the taxation on timber lands and that subject was up very often in his Court. They were looking into that as much as possible. Whenever he got out into the foothills, although he does not know that he ever went just especially to look at these lands, he always did look at them, while he was there and had them pointed out to him as much as possible, for the purpose of bringing the matter before the court, to settle the valuation of them for taxation purposes. When he was traveling through he would necessarily look at the lands. He did not follow the lines or anything of that kind but had certain sections pointed out as Company lands and generally talked with farmers and settlers in the neighborhood about them. He would not go through these lands like a cruiser would, but made an examination for the purposes of valuation and fixed the values with the assessor. The assessor did not make a personal inspection or have a cruiser inspect these lands. They went up there personally and passed their judgment upon this land by passing through them.

Whereupon on redirect examination witness testified that he knows of quite a number of homestead entrymen, who as soon as they secured their title from the Government sold it, to some of these Eastern land syndicates. These homesteads were on the even sections and were about of the same character as the lands that he has

been describing. They were timber lands, that is, the value was in the timber and not in the land.

Whereupon on re-cross examination witness testified that a number of settlers have gone up there and remained on the land, homesteaders, one generally finds them along these streams, or in some places where the rolling country between is open, they have taken advantage of that. It is true to some extent that as the clear lands at the bottom of the valleys are settled up, people have been taking the poorer lands, and going up into the hills, but there has been very little clearing going on up there, one will find a few places where they have done that but very little.

Whereupon W. H. FALLIN, called as a witness on behalf of the defendants, being duly sworn, testified that he is forty-nine years old, lives at Grants Pass, Oregon and works for Josephine County in the assessor's office. He has been assessor of Josephine County since he was elected in 1902. He was deputy sheriff and tax collector four years before that. During his time of office as assessor he had absolute charge of the classifying and cruising of all the lands in Josephine County, railroad, Government and all of it. As assessor he had been on the land a good deal and really knows about the lands. He never cruised any and don't know anything about cruising. The unsold lands of the Oregon and California Railroad Company is mountainous, part of it is timber land and part of it is barren. It is bald hills considerable of it; he realy did not cruise it, there wasn't enough timber on it to cruise it. To which testimony

complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of this grant, settlements thereon and public land entries thereof. Whereupon witness testified that this barren land that is free from timber, is rough, rocky and barren granite, with some gass growing on it. He would think there was not over five per cent of this unsold land in Josephine County that would be suitable for agricultural or horticultural purposes, that one could use at all. Wherever there is a stream or creek, there is probably a little bit of bottom land there, that might be used for agricultural purposes. There might be a little hillside, but in certain townships, say 36-5 near Grants Pass, there was some lapsed contracts that have gone back, where the land is fair, that can be used as agricultural land, but this is all scattered, isolated land.

"Q. How large a parcel with reference to, say, any particular 160 acres would this parcel or tract be that could possibly be used for any agricultural purpose?

A. Well, there are a few instances where you could get—well, you might say, take 9 Section 36-5, the Southwest quarter, you could get probably 80 acres out of that, and you might out of the Northwest quarter—the west half of the west half—that is pretty fair land; but it has gone back to the company; it has all gone back to the company.

Q. That is to say, this that you refer to as possibly adapted to some agricultural purpose is land which had been years ago contracted for sale by the company and then forfeited by the purchaser?

A. That is it.

Q. Well, then, if the purchaser let it go back, the land was then of not very much value, was it?

A. They couldn't make a living on it. I knew the people."

Whereupon witness further testified that a very small per cent of the lands that are covered with timber, where timber is the chief value, could be utilized for agricultural purposes after the timber is removed, he would say that it was not over five per cent, that would be putting it pretty strong. The character of the soil of these unsold lands in that county, even where the timber is standing and growing, is generally granite formation, called granite land. Grass don't grow where there is heavy timber, but will grow during April, May and June, when there is some grass, and one can graze almost anywhere in the open country, all over there, but that don't last long. There is a kind of browse,—there is pea vine there, and different stuff growing in that country.

"Q. Suppose that an actual settler, so-called, should apply to the company under the act of April 10, 1869, to buy at the rate of not to exceed $2.50 an acre, a tract of this land not exceeding 160 acres, and the company should sell it to him, and there was no other land there over which he could roam his stock outside of his 160

acres, what would be his ability to make a home of his 160 acres, and support himself, or himself and family if he had one, in your judgment?

A. I do not think he could make a living on it. In fact, they don't live there. There is many a township where there is not a settler living there.

Q. Why wouldn't he be able to make a living, as an actual settler, for himself and his family?

A. The ground wouldn't be productive enough. He couldn't raise anything. And he couldn't graze enough cattle on 160 acres—there wouldn't be enough sustenance for them to live on.

Q. Something has been said in the record in this case about clearing off some of this land by grubbing it, burning the timber stumps, and then seeding it to grass. I wish you would state, in your own way, whether or not any of this land is available for such use, and whether it would be at all practicable for this so-called settler to make a living that way on 160 acres.

A. There are thousands of acres in that country without any timber at all. They had bald hills—there is no grass there only for a short time.

Q. Couldn't a man have some of this land cleared, and take 160 acres of it, after the timber was cut down, seed it to grass or some kind of forage, and make a living by raising stock on the 160 acres?

A. Well, he might, but I don't believe but a little of it. Of course, he might pick out a piece once in a while

that you could do that.

Q. Do you know of any instance in that county where any other party is attempting to make a living in this way on this land, as grazing land, limiting it to 160 acres?

A. No, not in those outside districts.

Q. I am not inquiring of you, Mr. Fallin, about the bottom land in the Rogue River Valley, or the land that was taken under the Donation land law in such portions of the county as were settled in the fifties and later, under the Donation land law or prior settlement laws, but I refer to lands of the class of these unsold lands of the Oregon and California Railroad Company could a man make a living in any way on any of these lands, excepting by selling the timber?

A. Of course, I couldn't tell whether he could, or whether he couldn't make a living. They don't do it—they don't try to do it. There isn't any one living in those districts. Of course, a man might or he might not."

Whereupon witness testified that he does not think there is a settlement in Township 33 South, Range 7 West. There is a man mining in Section 34 and there is another man in that township, but no one lives there; and in Township 34 South, Range 7 West, is about the same, the railroad goes through the edge of that township. Leland is in Section 8, Township 34 South, Range 6 West. One could not get more than ten miles away from that, and if one did, he would be closer to Wolf Creek. There are no settlements in that township. There

are some miners there. The reason the country is not adapted to settlements is that they cannot live there. It is different in different townships. He could show a settlement in Township 33, Wolf Creek, and at Tyler Creek, but between there and the lower part, that is a mining country. There is a settlement at Wolf Creek in the little valley along the creek; which valley is narrow, averaging about a quarter of a mile on either side up, and gets into the mountains and is abrupt. There is some red soil in Josephine County, generally on this high land, which is very good; and some white granite, which is not. The red soil is considered good fruit land; and in that red land are all the gold mines and placer mines, the banks are red. When one gets a hillside that is protected right he may get a piece of land that is good for fruit culture, but the per cent would not be great, it would not be over five per cent on the whole, he has included that character of land in his estimate of five per cent, he figured on the whole thing. As a general thing the land in Josephine County is not heavily timbered, although in Township 34 South, Range 5 West there is some very heavy timber on the east line, which is good timber, down in 39-5 and 6 West, is good timber, generally it is light timber, but of good quality. There is sugar pine in there and it is high grade timber, what there is there. There is a reserve there, as shown on Defendants' Exhibit 259, and also a reserve known as the "Ashland Forest Reserve." These reserves are mostly timber lands. The Siskiyou Forest Reserve was established in 1907, and is in Josephine, Curry and Coos Counties, he thinks. He does

not know whether any of it is in Douglas County or not. The general character of those lands is timbered lands, mostly unsurveyed land, and as far as Josephine County is concerned, is unsurveyed. These reserves run into the grants. Whereupon on cross examination the witness testified:

"Q. What years did you say that you were assessor in Josephine?

A. I am assessor now.

Q. You are at present assessor?

A. I am working at the office, and I have been since 1902. That is when I was elected. I have been connected there ever since.

Q. You have been assessor since 1902?

A. No, not assessor. I have been working in the assessor's office, but not assessor.

Q. You never have been?

A. Yes, I was six years.

Q. What years were those?

A. 1902 to 1908. I had the timber cruised while I was assessor.

Q. Who is the present assessor?

A. Pollock.

Q. Now, you are a timber cruiser, Mr. Fallin?

A. No.

Q. What has been your business during the last 15

or 20 years?

A. Assessing.

Q. Assessing all during that period?

A. Yes.

Mr. Fenton: During the last 15 or 20 years?

A. Oh, no, I was deputy sheriff four years."

Whereupon witness testified that before entering the public service he was in the merchandise business at Grants Pass. He has never been employed by the Southern Pacific or Oregon and California Railroad Companies. Generally speaking Josephine County is a good fruit country. They raise good fruit there. The same general character of soil does not exist all through the county. There are favored localities where they raise good fruit, and others where they cannot raise it. A large portion of these unsold railroad lands is rolling, and might contain considerable soil for fruit raising. He has never been engaged in the fruit raising business, except just around his home; he has some trees at home, in his door yard, and has some apples, peaches and plums, and different things like that. Grants Pass is the center of a fruit raising country. He had charge of making these examinations of these lands for classification with reference to assessments. He hired men, and thinks Mr. Pollock the present assessor, was his deputy and was one of the cruisers employed by him, getting a cruise of the lands. This classification is on record. There is one in the assessor's office and another in the clerk's office

which is the same thing. All of these lands of this grant are classified as to being timbered or agricultural and assessed on that basis. He has assessed in every place and went all over the county. Has not inspected personally all of the land; never went on lots of the land, because he had no occasion to go there. Every place where there was a settlement he had been, assessed the people in there and looked at the land. By settlement he means where there is anybody to assess; he would go and see them, and has done that for many years, that is go and see the settler all over the county. He did not go to every place one year; but he did go, and he has testified from what he has observed during these trips.

"Q. You never made an examination of the 40-acre subdivisions of these lands, to see if 160 acres could be selected that would contain enough land to make a living?

A. No; no, I never did that personally.

Q. Not money, but a living for a man and his family—a settler and his family?

A. I have only examined the reports that the cruisers brought in. They reported on the land.

Q. You base your knowledge largely upon that?

A. Yes to that extent."

Whereupon witness testified that taking all the lands in Josephine County there are about 20,000 acres in cultivation, that is what the assessment roll shows. He does not think there would be over five per cent of the whole

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land in the county that would be susceptible of cultivation, and does not believe there is that amount; it might run a little bit more, but not much, that is the general average, he thinks, of course, that is only his opinion. Whereupon on redirect examination witness testified that the fruit land adapted to fruit culture and used for fruit in Josephine County is all over the county. They raise fruit all over Josephine County, where there is any settlement. Fruit that is grown for commercial purposes is chiefly located in the Rogue River Valley, on the valley ground. The Rogue River Valley, as it passes through Josephine County, is not very wide. Below Grants Pass it would probably be a half mile on each side of the river in width; that is, the bottom lands. He does not mean the foothills. It is about a mile wide for probably ten miles below Grants Pass. Above Grants Pass it is not so wide. There is not much there, it is a narrow valley. There is some very good fruit lands in the foot hills immediately adjacent outside of this valley. Another half mile on each side would be along the sunny foot hills, along this valley. A lot of this land within that mile which is broken and hilly and some of the soil is decomposed granite and is not all in cultivation by any means. The lands adapted to fruit culture within that mile limit would be more or less spotted. The assessor's rolls show that there is about 20,000 acres of agricultural land in the entire Josephine County, that is, there is that much on the assessment rolls in actual cultivation. He does not know how long it has been since the first lands were settled in the Rogue River Valley, but it was by

Donation Claims, under the Donation law. Grants Pass has been a town since 1883, or 1884. He does not know when the railroad was constructed to Grants Pass. He came in 1888 and the railroad was there when he came and had been built through to the California line at that time. He only knows from hearsay when it was completed from Ashland south; it was through when he came there. The population of Josephine County is about nine or ten thousand.

Whereupon IRVINE P. GARDNER, called as a witness on behalf of defendants, being duly sworn, testified that he is thirty-seven years old, by occupation a surveyor and timber estimator, and resides at Myrtle Creek, Oregon, and has lived in Douglas County between five and six years, and has been buying and estimating timber during that time. He had charge of appraising Indian lands for about two or three years, in Minnesota, for the Government, and took the ranger examination and surveyed out and selected ranger sites for the Government in the Cascade-Umpqua National Forest Reserve for a few months, and cruised timber for the last fifteen or sixteen years for a living. During his summer vacations, while at college and law school, he ran compass in Northern Wisconsin and Northern Minnesota, with the exception of one year of the Spanish-American War, in which he participated. In the fall or winter of 1898, he went into the woods in Northern Wisconsin, estimating and logging, and worked there two years, running compass most of the time, and doing some estimating. He then went with Major G. L. Scott, Indian

Agent at Leach Lake, Minnesota, and took charge of the surveying and appraising of Indian lands for him. The year prior to that he was superintendent of logging on the Northern Pacific Railroad for the Ashland Iron and Steel Company—estimated timber and cut it for the furnaces. He was with Major Scott then for about two years, and then with Major Michelet at White Earth, Minnesota, in the Government service. He then estimated and bought for Nichols & Chisholm Lumber Company and the Shevlin Company—estimated and scaled in Minnesota. For the last four years he has bought and estimated for the Neenah-Oregon Land Company of Wisconsin, a corporation of Neenah, Wisconsin. His headquarters have been in Douglas County, and all his work in Oregon has been in Douglas County, with the exception of a little in Josephine and Jackson. He has cruised in Douglas County about 4,000,000,000 feet of timber situated on about 100,000 or 125,000 acres. The lands except in the indemnity limits, have been altogether where people have filed or they have been the even sections. He has been in the South Umpqua country, practically to every quarter post and corner, and on most of the railroad lands, with the exception of a year ago this winter, which he spent in the abstract office which they have, in which the President of his company has a half interest, referring to the Commercial Abstract Company of Roseburg, he has been in the woods continually, probably two hundred and fifty days in the year he has been estimating, mostly in the South Umpqua country. He has estimated and bought all the Neenah-Oregon

Land Company's lands on the South Umpqua River and Myrtle Creek. He has a general or specific knowledge of other unsold lands of the Oregon and California Railroad Company in a good many localities in Douglas County. He has been out estimating for other people, and one year before he went to work for that Company he worked on general estimating, estimated all over the county, wherever his clients wanted him to. There are three or four methods in use by cruisers. The two general basic methods are, what are known as single running and double running of forties. To single run a forty, one starts at a known corner, and would go north or east or south or west, as the case may be, two tallies or 250 paces; then run directly through the land which they are estimating north, east, south or west, as the case may be, tranversely, directly across it. That puts one on each ten acres of the land that one is looking at. In double running, one goes half the distance, and then horseshoes it, as it were, or 125 paces, which would put one on every two and one-half acre tract of the land. In order to ascertain the amount of timber, one could take it, either strip method or circular acre. The strip method is taking everything for 250 paces, or two tallies, thirty-three feet, on each side, which gives an acre. The circular method is standing in one place and taking everything in a circle within approximately fifty-five paces, giving a circular acre. The contents of a tree, as a general rule, is arrived at through volume tables, which are tables made through the figuring of contents of trees at mills. There are the Clement Table, King's, Spalding's and

several others. Spalding's is one of the standards. The Government has adopted Scribner's Decimal C Rule as its standard. As a general rule, a cruiser obtains the height of timber through pacing down timber. In almost all forests there will be a certain percentage of down timber. Probably on a quarter section one would pace ten or twelve, or even only four or five or six trees, to a certain diameter, starting from the butt pacing, and get the height that way. All volume tables practically are made either stump or breast high, inside the bark at the stump. In exact estimating which they do, they always use what is known as a diameter tape, which gives the circumference. Measuring around the circumference and subtracting the bark, will give the diameter figured out. In getting the height of the trees by computation, where it is not paced, one can use a clinometer, which is a scale figured out, or can use half of a square, with a small level on it, and by pacing the base of the square, and sighting up to the top of the hypotheneuse, where one can catch the top of the tree—the base and perpendicular will be the same, what one would have to pace on the base would give the height of the tree. The remaining unsold lands of the Oregon and California Railroad Company in Douglas County, Oregon, would average, probably, 35,000 feet board measure straight through per acre, counting everything. To which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the char-

acter of the lands involved within the limits of these grants, settlements thereon, and public land entries thereof.

Whereupon witness testified that these unsold lands are chiefly valuable for their timber. In the present condition, at this time, a great deal less than one per cent of this total area, in his judgment, would be available for horticultural or agricultural purposes. Twenty-five to thirty per cent could be farmed after the timber is removed. He has a homestead of his own, and what clearing he has done has cost him from one hundred to two hundred dollars per acre, and he has cleared a great deal of land, and helped clear land in camps.

Q. From your knowledge of the timber that is on this land, that you say might be utilized for some agricultural or horticultural purpose after the timber was cleared, what would you say the average cost per acre would be to clear such land and make it available for use?

Q. Go ahead and answer.

A. After the timber is cut or before, at the present time—take it in its present state?

Q. Take it as it is?

A. Taking it in its present state, the average cost would be from $75 to $100 per acre to clear.

Q. Do you say, or do you think that you could clear some of this land that runs 6,000,000 feet board measure to a quarter section, at the rate of $100 an acre?

A. Why, it would have to be done in a commercial way, with donkey engine and derrick. Certain people are contracting to. It costs from $10 to $25 an acre to slash, and it will take on your trees anywhere from two to ten sticks of powder per stump. I never figured it out that way, but it would take—some of it could be done. It would probably average nearer $150 than $100 to clear it free of stumps.

Q. What is the fact, if you know, as to the presence of the roots in the ground of these trees, after the stumps are blown out by powder?

A. Well, if they blow the stumps out, the roots will bother if not pulled up for a few years.

Whereupon witness testified that these unsold lands are practically all mountain lands. In Douglas County, the part that he has been over, runs from five hundred feet, which is the elevation of the Umpqua River at Roseburg, to points in one or two places, five thousand feet. The majority of the divides between the different places, the summits of them, will probably average from twenty-eight hundred to thirty-five hundred feet, that is, between the different ones—Cow Creek and the North and South Umpqua. A large majority of these lands is in the Cascades and Cascade foothills and Coast Range and Coast Range foothills. The average elevation would probably be 2000 feet. The majority of the lands are at an elevation of about 2000 feet, because in the bottom of the valleys, the elevation will run from 1000 to 1500 feet, and the crest from 2500 to 3000. He uses an

aneroid in all his work and takes the elevation on every ten acres and every section line in the country, and at all his bases, he takes the elevation. He bought or estimated all of the lands indicated in red on Defendants' Exhibit 312, owned by the Neenah-Oregon Land Company. He has been over township 25 south 2, for the Ferry Estate, and has been in a great many of the townships at different times. These lands are practically all heavily timbered. The entire holdings of the timber companies represented in there will run very close to 60,000 or 65,000 feet board measure per acre, referring to all the timber holdings represented on that map, Defendants' Exhibit 312, other than the Oregon and California Railroad Company. The majority of these scattered parcels about Looking Glass, up to, say, Yoncalla, shown in green, are open and barren lands, along the summit of the divides, which were not purchased with the bulk of the land. The unsold railroad lands indicated by these colors in green, within the area just mentioned, appearing still to belong to the Railroad Company, are mostly grazing lands in the spring. A great deal of that land was sold by the Railroad Company on contracts that were defaulted, the purchasers did not make the payments. Some few of these scattered parcels in that area along the river are agricultural, but most of that soil is bad. It could be settled on, but a person could use it only for grazing or pasturing, that is, a majority of this land. A settler could not make a living on any of it, or very little. From the records of the land office and district court, and the abstract company with which

he is connected, a large area of lands that are unmarked with any color, that are white on this map—Defendants' Exhibit 312—show that they were purchased from the railroad company under contracts, or else taken as donation land claims, that is in the old settled part of the Umqua Valley. He has been all along the Umpqua River from Winchester Bay to Roseburg, and up all around the summit of the divide, and inspected all the range on the summit of the divide, on the South Umpqua and Rogue River divide. Ninety-five per cent of the even sections, within the limits of this grant and adjacent to the railroad lands, is covered with merchantable timber. From his experience in the abstract office and looking up title, checking blue prints, etc., he knows that the title to the even sections, where the title has been disposed of, has passed into the hands of timber companies, a good deal of it. It was originally entered under the Timber and Stone Act, the Homestead and the Commutation or Cash Entry Act, and scrip. A great deal of it has been taken under the Act of July 30, 1898, and the Acts of 1902 and 1903. The Act of July 30, 1898, is the act of Northern Pacific scrip, individual claimant scrip. The Neenah-Oregon Land Company has bought probably thirty homesteads, which it will be glad to lease for taxes, and cannot lease one. It has offered to lease these homesteads to persons who would take possession for the payment of taxes. In five years it has leased one piece, very close to a school house up in the mountains. Very little of this land is capable of being used for agricultural purposes. In the South

Umpqua country, in Township 28 South, Ranges 3, 4, 5; Township 29,—1, 3, 4, 5, 6, 7, 8 and 9; Townships 31, 32, 33, most of 34; 31—1, 2, 3, 4, 5, 6, 7, 8; 32—1, 2; parts of 32—3; 32—4, there are not five homestead entrymen living on the land, title to which they obtained under the homestead law. There may be more than five, but there are very, very few. Looking over the country generally, his blue prints and in the abstract office, probably in that territory five hundred people obtained that land under homestead or the commutation act. The rest was taken under the Timber and Stone Act. He is not stating anything but what he has examined himself personally, through cruising. A great many of their cabins have been burned, and a great many have been abandoned. Some few of them, the patches that they have are being used by cattlemen and others, who keep up the fences.

Q. What I am getting at is, the entryman that settled the land, what has become of him in nine cases out of ten, if you know?

Mr. Rabb: Objected to as leading, suggesting to the witness the answer to the question.

A. Sold out and out of the country, most of them. A majority of this land in our part of Douglas County was settled in 1902 and '3 and 1901, a great deal of it by people who came from Michigan, Wisconsin and Minnesota and took up land.

Now, in the main, to whom were these homestead claims or homesteads transferred,—to what class of pur-

chasers, from your knowledge, if you know?

A. Timber companies.

Whereupon, on cross examination, witness testified that he was born in the State of New York, and went to Omaha in 1887, and spent all his summer vacations, until 1898, in Northern Wisconsin. Bayfield was his summer home. Until that time he ran compass, scaled around the mills, worked on the booms, worked with boats. When there was nothing else doing, during his vacation, a good part of it, he worked in the timber business, that is, worked at it when he was not fishing or hunting. By an estimator, he means one who cruises and estimates timber for a living. He actually cruised himself, and was engaged in that business in Minnesota, and surveying. He had charge of surveys, but had to appraise the amount of timber on the Indian lands and the quality of soil for the purpose of selling, and has followed that occupation for a living ever since. The President of the Commercial Abstract Company is DeWitt Van Ostrand, of Phillips, Wisconsin, who is also President of the Neenah-Oregon Land Company, and has a half interest in the Commercial Abstract Company. The Commercial Abstract Company is not interested in the lands. He worked in the office looking up records and titles to what lands they got. His duties in the office are nothing at all, excepting two years ago this winter, in bad weather, he went into the office of the Commercial Abstract Company and his salary went on. He has done very little work for the large lumber companies interested in that vicinity in

Douglas County, aside from the Neenah-Oregon Land Company, for which he worked steadily for four years, with a few exceptions. His testimony and his knowledge of this grant is confined to Douglas County. They bought in 35—7 in Josephine County, about one thousand acres, and he has worked quite a little along Rogue River. His specific knowledge is practically all in Douglas County. He knows very little with reference to other lands, and he does not want it understood that his testimony goes further than the limits of Douglas County. He would not testify to anything he did not know personally. Less than one per cent of these lands are agricultural in character in Douglas County, in his opinion, until the timber is removed. He would not include grazing as an agricultural pursuit in the timbered lands, because almost all the green places shown on this map might be classified as grazing lands. There is good grazing land on a good deal of it for a month or two in the early fall and before it dries up in the spring, those rocky ridges. When he makes his estimate on each and every forty, he figures the amount of tillable land on it. His estimate would read something like this: So many acres in cultivation, cleared; so many acres susceptible of cultivation when the timber is removed; so many acres grazing; so much rough and rock and barren. He has a homestead in Section 18, Township 28 South, 3 West. Part of it is agricultural land, what he has cleared, about twenty or twenty-five acres now. He took that up for the purpose of making a home, and he has a home.

Q. Now, Mr. Gardner, referring to Defendants' Exhibit 312, I will ask you as to the lands in Township 28 South—4 West, what percentage of those lands is agricultural?

A. Section 1 is on the divide, on the head of North Myrtle Creek. Along the creek, along the main creek, which is heavily covered with timber, there would be a strip of land when the timber is cut which would be agricultural in character, in the Southwest quarter of the section. Section 3 has some land on it which is agricultural, probably fourteen or fifteen acres. I know very little about Section 5; 7 is on the divide, and has quite a little grazing land on it, very little of it tillable. Section 17 is all rough, steep and mountainous. Section 15 is all very steep, with the exception of some mining land, or land that they attempt to call mining land—illegal mining locations—in the southeast quarter the bottom land is all washed out through placer digging there along the creek. Section 13 has quite a bottom of Myrtle Creek, but the remaining land, with the exception of the north half of the southeast quarter, which is along by the fork and good bottom, is all rough and mountainous. Section 21 is all mountainous, with the exception of a small piece on Lee's Creek. Section 19 is nearly all—all the land on that that is left is quite mountainous, but there is a bench in the northwest quarter that will probably have, when the timber is cut, some very good land on it—the north slope of the bench. Section 29, that is all mountainous, the remaining land. Section 27, the west half of 27 is that west of the creek,

west of Myrtle Creek, which goes through in a northeasterly and southwesterly direction. That west of the creek is a gentle slope; that east of the creek is very rough. 31 is all mountainous, practically. 33, there is no agricultural land in 33 at all. 35 is on the crest of the divide between North and South Myrtle Creek. There is very little land on that any use. 23 is covered with mining locations, practically all of it. 25 slopes into Riser Creek, it is quite steep. That is all.

Whereupon witness testified that in that specific township, at the present time, very little of it is agricultural, probably 25 per cent of that township is agricultural when the timber is removed. It is all grazed at times with sheep and cattle, certain times of the year; this year for six weeks from about the first of June until about the middle of August. In the middle of July they take the sheep out. The feed is not good in August. There are probably one thousand acres of the unsold lands of the Oregon and California Railroad Company in this township that are good grazing lands. There is a very little of it that could be plowed at the present time, probably forty acres. 29 South is alll grazed at times, everything in the country. The whole country is grazed, but it is not what you might call grazing land. It would take probably an average of 160 acres, more or less, to support a cow. There is some burned over land; there is no bunch grass. Bunch grass is about the only thing they can fatten on in that township; but cattle do well along the creeks in the heat of summer. Practically all of the land in that township has

been taken, either commuted or homesteaded. Of the unsold lands of the Oregon and California Railroad Company in Township 29—3, probably 25 per cent, after the timber is removed, is agricultural land. At the present time there is very little. When the timber is removed, he would say not over 20 per cent is agricultural. He would not say that all of it is good for grazing, but they graze over it all; but there is very little grazing except on the burned ridges. There will be a burned ridge running through it, that would have fair grass or pea-vine. In the mountains they do not graze on grass much, but mostly on pea-vine, which is only good from the time it gets its growth, gets some substance to it, till the middle of July, when it dries up and is not good. It is a pretty hard question for anybody to answer, what percentage of this land is grazing land when the timber is removed, that is, it would take a lot of time, and it would be a guess for him. He would say that the top of all the ridges which would have pea-vine on for a month in the year, when the cattle and horses could support on that, would be grazing land, but he could not state the percentage, but it would be just a guess. The township grazes, with what they use in the bottom—there is only one man who is extensively in the cattle business, that is Lloyd Ade, in section 21, 16—28, and he runs, with what feed he has in the bottom, about 100 to 150 head of cattle, and he is able to graze them in the summer, and that is about all the grazing that is being done in that township now. He said that with his stock the range was pretty well stocked. When the land is cleared, if

it should be seeded down in the ashes, in that township, it probably would be 25 per cent grazing in addition to the 20 per cent of agricultural. Probably one-half of it could be used for grazing when it is cleared and seeded. Very little of the unsold lands of the Oregon and California Railroad Company in that township is agricultural in its present condition, none that he knows of in township 29—3. Probably five or ten per cent along the ridges in township 29—4 would be grazing, but the timber lands are all grazed at certain times of the year, not to exceed five per cent on the burned ridges, in their present condition. All of it is not grazing lands. That is, nobody can answer that. In Roseburg he told Mr. Underwood that one could use that land only for a very limited time; that one could run cattle; the great proportion of it could be grazed, but it would support stock for just a few days in the year. In the present condition, probably 50 per cent of that land could be grazed for only a few days in the year. It is an awfully hard proposition to fix what percentage would be grazing, unless one will fix some basis. The Government fixes the basis for that in the forest reserve. In the township referred to, there is not over 250 head of cattle on the odd and even sections, and the range is overstocked. There is very little land in Township 29—4, probably one thousand acres that are chiefly valuable for grazing purposes. After the land is cleared and seeded there would probably be 2500 or 3000 acres. After the land is cleared very little within 29—4 would be agricultural land, and of the unsold lands of the company probably

ten per cent in that township would be agricultural. There are 225 head of cattle grazed in township 30—1 south in the National Forest Reserve during the summer season, and the range is pretty well stocked. There would be about twenty acres in Section 21, in its present state, that would be agricultural. There would be about one-twentieth of one per cent of the thirteen sections in that township that would be agricultural, and about twelve and a half per cent of the unsold Oregon and California Railroad Company lands, probably one thousand acres, in that township, in the National Forest, as grazing land at the present time, and after the timber is removed, or the land is cleared, there will be fifty or sixty per cent of that township that will be grazing, but it is covered with a very heavy stand of timber. About twenty-five per cent of the land would be agricultural land. At the present time, with the exception of an old orchard and old buildings in the northeast quarter of section 23, there is no agricultural land in the unsold portion of township 30 south, 2 west. There are about fourteen or fifteen acres of agricultural land in the Northeast quarter of section 23, which would make one-thirtieth of one per cent of that unsold land in that township agricultural. It is all grazed. There are about seventy-five head of cattle running in there now. Probably ten or fifteen per cent of it would be grazing land in the present condition, and when cleared, probably twenty-five or thirty per cent of good grazing and agricultural land; probably twenty per cent agricultural, and probably 15 or 20 per cent would be grazing land, when

it is cleared and seeded and burned. Probably one-tenth of one per cent is agricultural in township 30 south, 3 west, there is just a little patch there, grazing, south of the river, that is, one-tenth of one per cent in the entire township would be agricultural, and twenty-five or thirty, maybe forty per cent in that township, possibly, of grazing land, when the timber is removed. There is a little patch there of agricultural land in the present state, which could be farmed, and when the timber is removed, there will be a probably fifteen or twenty per cent in that township which would be agricultural land, and after the timber is removed probably an additional twenty or twenty-five per cent, maybe more, in that township, would be grazing land. It is a pretty fair township. There is only a small fraction in Section 23, Township 30 South, Range 4 West that is cultivatable at the present time, in the entire township, probably one-tenth of one per cent, and probably ten or fifteen per cent grazing land in the present state. After the timber is removed there may be probably ten or fifteen per cent on the benches that would be agricultural. Practically all the good agricultural land in that township has been taken. There would probably be an additional ten or fifteen or twenty per cent after it is seeded, that would be grazing. In 30 south, 5 west, there are a few little places that are cleared. He thinks most of them are under contract at the present time, and probably five or ten per cent grazing, burned over. Practically all this township when cleared could be grazed. There is very little agricultural land remain-

ing. It is all contracted or sold in that township. Probably five per cent of the remaining would be agricultural, and the balance, probably forty or fifty per cent, would be grazing land. Probably forty acres in Township 31 south, 1 west, is agricultural at the present time —referring to the unsold lands of the company—and probably twenty per cent is good grazing at the present time. About one-fifteenth of one per cent of the unsold lands in that township, would be agricultural; probably fifteen or twenty per cent at the present time grazing. After the timber is removed twenty per cent could be plowed; probably half of it would be grazing land; probably seventy-five per cent of that land would be grazing land. All agricultural lands can be grazed too. He makes these estimates off-hand, from his practical knowledge of it. There are about twenty-five acres in Section 1, Township 31 south, 2 west, which is all the agricultural land there is at the present time, amounting to one-fourth of one per cent, and twenty per cent of grazing land. There is a good deal of burn in that township. Probably five per cent of this township when cleared, would be agricultural in character, and fifty per cent grazing if seeded. 31—3 south, with the exception of a little on Cow Creek, is all timbered and mountainous on the divide. Only two homesteaders went into that. None of the unsold lands of the company in that township are agricultural at the present time. Twenty-five per cent would be grazing. Probably ten per cent would be agricultural, and twenty-five per cent, maybe thirty per cent, grazing, when the land is cleared. About one-

twelfth of one per cent of the land in Township 31—4 South, in its present state, would be agricultural, and twenty per cent grazing; and when cleared, five per cent agricultural and thirty or thirty-five per cent grazing. There is no agricultural land in the unsold lands in Township 31 South, 5 West, and very little grazing; he would say about five per cent. This township is all heavily timbered and steep slopes. but most of it, the southwest part of the township, all the railroad land and the other, has been bought by the Duluth Timber Company. He is basing his estimate on these unsold lands of the O. & C. Company, shown by Defendants' Exhibit 312, and is not including the lands of the Duluth Timber Company or any other timber company, in making his estimate. After the timber has been removed from that township, one per cent will be agricultural, and five per cent grazing. There is no agricultural land—no one living in township 32 south, 1 west, except one person in section five. There are ten acres in Section 5, in lot 2, that are agricultural in character, and that is the only agricultural land in that township. One-twentieth of one per cent would be agricultural, and five per cent grazing. It runs from 65,000 to 70,000 feet per acre. After the timber is removed there would be very little agricultural land there; probably one hundred acres in the township, or two per cent of it. On top of these divides there would be a section or two of grazing land, probably ten per cent. Township 32 south, Range 2 west, has just been surveyed. There is no one living in that township except three settlers. This township is outside of

the definite limits and has never been patented to the company. He is well acquainted with these lands in that township. The company never had any lands to sell in that township. It is outside of the map of definite location. All of these townships mentioned in his testimony are west of the Willamette Meridian. In township 32 south, range 3 west, one-tenth of one per cent of these unsold lands are agricultural in character, and twenty or twenty-five per cent grazing, and after timber is removed, twenty-five per cent could probably be tilled and probably an additional twenty-five per cent grazing. The company owns no agricultural land in township 27 south, 3 west. Probably twenty to twenty-five per cent of that land in that township is grazing in its present condition; probably ten per cent would be agricultural when the land is cleared, and fifteen per cent additional would be grazing. Of the patented lands of the company in township 28 south, range 3 west, there are no agricultural or grazing lands on either of the two quarter sections. They are both in the forest reserve. The rest of it is all settled on. This exhibit shows nothing but 320 acres of unsold railroad land in that township. He is acquainted with all of the lands of the O. & C., excepting in the Forest Reserve. His acquaintance has been from cruising the even sections. He has cruised all the even sections in these townships and going onto the O. & C. lands and crossing them in criusing the even sections. The two quarter sections shown on this exhibit are both very rough, rocky and mountainous and are heavily covered with a dense stand of timber. The north-

west quarter of section 19, and the southwest quarter of section 31, in Douglas County, described in the complaint, are both covered with a heavy stand of timber, and are of very little use for anything except timber value. There is no agricultural land, and probably ten per cent of these lands would be, for a certain time of the year, grazing. There are a couple of pea-vine ridges through there. About 20 acres in township 26 south, range 2 west, is agricultural in character at the present time. In section 7, along the North Umpqua River, there are about twenty acres covered with an application, he thinks the records show, that was in cultivation. Probably twelve per cent of the 8000 acres grazing. The south half of that township is covered with a stand of timber that will run 100,000 feet to the acre, 7,000,000 to a forty. There is a good deal of those benches—that is a very peculiar township, built just like a ladder, the lands jump up about 1000 feet and then there is a bench, and then jump up another 1000 feet, then 3000 feet from the North Umpqua river. These benches are covered with a heavy stand of timber—very good land; they are north slope benches. Probably twenty per cent of that land could be plowed after the timber is removed, and probably an additional twenty per cent would be grazing. In township 28 south, range 3 west, he has testified that none of the unsold lands would be agricultural. He has never cruised the south half of that township, which is in the Forest Reserve. He has not testified in regard to the south half, he never cruised it and could not testify to that. He has been through the south half of

the township probably a dozen times, through the trails —White Rock and other trails. He lives in that part of the township, and aside from along Buck Fork and one or two of the creeks, it is quite heavily covered with a dense stand of timber, and probably not over ten per cent would be agricultural when the timber is removed. His homestead is Lots 1 and 2, the east half of the northwest quarter, section 18, township 28 south, range 3 west, Willamette Meridian, Oregon. There are only 320 acres in that township among the unsold lands of the company. They are all rough, rocky, mountainous—that is, the 320 acres. He would estimate none of it as agricultural. Ten per cent would be grazing; there are two ridges that run through it that would be fairly good grazing.

Q. Mr. Gardner, there is no difference between the lands in the even numbered sections and the odd numbered sections in thse townships that you have just previously testified to, is there? That is, Township 30 South —2 West; 30 South—3 West; 30 South—4 West; 30 South—5 West; 31 South—1 West; 31 South—2 West; 31 South—3 West; 31 South—4 West; 31 South—5 West; 32 South—1 West; 32 South—3 West; 27 South —3 West; 26 South—2 West; and 28 South—3 West?

A. Yes.

Q. What makes that distinction?

A. The clearing and settling on the even sections inside of the definite limits, by homesteaders and people that commuted, which—

Q. I know, but— excuse me for interrupting.

A. That is practically the difference, generally speaking. The land originally, there was very little difference.

Q. The land in its natural state was the same?

A. Practically the same, yes, sir.

Q. Now, isn't it a fact, Mr. Gardner, that if these lands in the township just previously mentioned were divided into 160 acre tracts by legal subdivisions, but not by quarter sections, isn't it a fact that the percentage of agricultural land would run from one to two-thirds of the lands situated in these townships?

A. Well, it would, in so far as anything suscepitible of being grazing at all. I will state for the benefit of the court, that the affidavit that you are referring to— they wanted me as a witness—stated that the land, if it is cut and seeded, would be good for agriculture. That is what I stated to Underwood. I don't know whether it is in the affidavit or not. And I stated it would be capable—anything you can run anything through, anything that has a spear of grass on it—you can run it through all of it, I said, except the rocky parts.

Q. Isn't it a fact that one-third would be agricultural lands and about two-thirds grazing lands of these townships that I have mentioned?

A. No. No, that would be the whole of it. One-third and two-thirds make a whole. It would not be that.

Q. You remember of having a conversation with Leonard Underwood, Special Agent of the General Land Office, on the 15th day of March, 1912, with reference to this land?

A. Yes, sir, I did.

Q. And at that time you made an affidavit before Mr. Underwood with reference to some of these lands?

A. I made a statement to him, yes.

Q. I will ask you to examine this document, and state whether or not that is the statement that you signed, or affidavit?

A. Yes, it is.

Q. In this affidavit, among other things, you state (referring to the affidavit): "That he (meaning you) is familiar with, and has been over repeatedly the South Umpqua country, being township 28 S., R. 4 W.; Twp. 29 S., Ranges 1, 3 and 4, W.; Township 30 S., Ranges 1, 2, 3, 4 and 5, W.; Township 31 S., Ranges 1, 2, 3, 4, and part of 5 W.; that part of Township 32 S., Ranges 1, 2 and 3 W., north of the Rogue River Divide in Douglas County. That from his knowledge of said area it is his judgment that one-third of same is agricultural in character, and the balance largely grazing land." Isn't that statement contained in that affidavit?

A. Sure that statement is. The affidavit speaks for itself.

A. The best evidence, I should think.

Q. In this statement do you not also state, "There

are now thousands of cattle and sheep annually grazing on same"—referring to the lands just previously mentioned?

A. I will state that that is the whole lands in there, that is including the odd and even sections; and the even sections, a great deal of it along the river, has all been farmed; and I told Mr. Underwood of it specifically, and said, why, certainly there is that many. There are several people run sheep there. They take them up while the pea-vine is green. This year they have had them there five or six weeks, then there was no more feed. They run sheep through there at certain seasons. He said that it didn't make any difference, if the land was agricultural, whether it was covered with a dense growth of timber, he said the land was of an agricultural character no matter how much timber there was on it; and he said that anything that cattle could run over at all was grazing land. Well, then, I said it is all that, because cattle runs all over it.

Q. Referring to the affidavit again, Mr. Gardner, you also stated in this affidavit, did you not, "That he (referring to yourself) is also familiar with and has repeatedly been over part of the North Umpqua country, being Twp. 27 S. Range 3 W; part of Township 28 S. Range 3 West; part of Township 28 S. Range 2 West; Township 26 S. Range 2 West in part. That the above area, in affiant's judgment, would run one-third agricultural land and two-thirds, or the larger part of two-thirds, grazing land"?

A. Yes.

Q. That statement is contained in the affidavit, isn't it?

A. Yes.

A. It does.

Q. Referring again to the affidavit, this affidavit states, does it not, "That affiant believes if said areas above described were subdivided into 160 acre tracts, the same percentage would obtain on an average per 160 acre tract?

A. Yes, sir.

Whereupon complainant offered the affidavit referred to in evidence as Government's Exhibit 117, to which defendants objected as incompetent, immaterial and irrelevant, and upon the further ground that the definitions of grazing and agricultural were given to the witness by the special inspector, Mr. Underwood, and the answer shows that it was the answer of the special inspector and not of the witness, excepting in those general terms. Which said exhibit was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified as Government's Exhibit 117.

Whereupon witness testified that the lands that he had in his homestead, in section 18, township 28 south, range 3 west, are timbered lands, and in a general way are the same general character of land as lands in these townships mentioned as to the timber, but he picked out

the only piece in there, that has less timber than there is on either side of him, so that he could clear it. It is in the range running through the Oregon and California, but is not of the same general stand of timber; it contains the same Douglas fir and incense cedar and the same sort of timber as the other lands. He took this homestead up to make a home for himself, for settlement purposes. His acquaintance is principally with the southern part of this grant. He is not so familiar with the northern part, only from occasional trips to look over an individual claim.

Whereupon, on re-direct examination, witness testified that what he saw of the northern portion is on the Calapooia and in the Rock Creek country and on the north Umpqua, and it is heavily timbered and rougher than his part of the country.

Q. Now, referring to this Government's Exhibit 117, who was Mr. Leonard Underwood?

A. Why, Mr. Leonard Underwood was special agent of the General Land Office. He was down there procuring evidence, I guess, for the Oregon and California Railroad suit.

Q. That is, for this suit, on behalf of the Government?

A. He told me that he would want me up here as a witness, and I told him that the land cleared, agricultural land, was very limited in all of it. He said any land which was fairly level, or could be farmed after

the timber was removed, was agricultural land.

Q. In other words, he gave you a definition of what he claimed agricultural land was?

A. Yes, sir.

Q. And he gave you a definition of what was grazing land? What did he tell you?

A. He did, in so far as I told him the sheep came up in there for a certain time of the year every year, and cattle did, all over the grant.

Q. Didn't he tell you that grazing land was any land that sheep or cattle could run over at all and feed on?

Objected to as leading.

A. Well, now, I couldn't state, Mr. Fenton, that he told me that. He said anything that you have ever seen cattle or sheep going over, but he didn't state it as broad as you did. He didn't tell me that.

Q. If he defined grazing land as anything that you have seen cattle go over or sheep go over, that would be his definition of grazing land, as you understood it in this affidavit?

A. Yes, sir.

Whereupon witness testified that the cattle that grazed over the lands of the South Umpqua country are owned by Ben Nichols, of Riddle, and Hi Acker, of Acker's Butte. He is out there in township 29 south, range 1 east. He runs about 65 or 70 head of cattle in

that township. Further east, Wright Brothers and Thompson have about 75 or 100 head of cattle, which they run over that whole country, and by what was known as the Short Ranch, now owned by two parties who have bought it, whose names he does not know. They run a couple of hundred head—they range over probably five or six townships. Most of these lands over which they range is deeded. They took these lands when they went in there; in township 31 south, range 1 west, all of section 15, half of 16, 9 and 4, and part of 3, were bought—all the open land was bought that they could run cattle on, and that is where they run most of their cattle.

Q. Is it or is it not true, if not, state exactly what the fact is, that the whole country is open wild country, in a state of nature, excepting here and there small tracts that may be enclosed along the creeks and streams, and that everybody's cattle in that whole country, local or otherwise, are during a certain season of the year, driven up there and allowed to roam at large over the pea-vine and such stuff as there may be in the woods and on the burns? State what the fact is.

A. They are.

Q. You may answer.

A. It is, yes, sir. The cattle are taken up into the forest reserve; but the local cattle, most of them, will follow the feed. In other words, they will work up in June and July up into the mountains, and when the pea-vine goes, then they work down, and in August

and September they will work on the creeks, where they can get lush feed and everything, and then after that they work down onto their patented lands.

Q. What character of vegetation is there on these railroad lands, upon which stock could graze and upon which they do graze at any time of the year or at such times of the year as they are there? What kind of feed is it?

A. Well, on the O. & C. lands inside of the grant, there is very little bunch grass. The majority of the time they live on the pea-vine.

Whereupon complainant objected to the foregoing questions as leading.

Whereupon witness testified that this grazing takes place from one to three months, from the time the pea-vine starts to get ripe in June, up to some time in August, and they follow the ridges and burns, and then get the pea-vine.

Q. Suppose an actual settler wanted to go in there and tender the company $2.50 an acre under the act of Congress, and claim to be a purchaser of 160 acres by legal subdvisions, what is the fact, if you know, as to whether that 160 acres would or would not afford pasturage of any kind for the support of any kind of stock, and if so, about how much stock, and for how long a time?

A. Well, I have on my place—speaking personally—I have four or five head of stock, and they eat about all that I can get.

Q. Yours is a very good place, down on the bottom in part?

A. Mine is on the creek bottom mostly.

Q. But I am speaking now of 160 acres applied for by some actual settler, under this so-called act of April 10, 1869, to buy it at $2.50 an acre and make a home on it.

A. There isn't a place, not one place on that grant, that a person could go on and make a living, of the unsold lands.

Q. Why couldn't he use it for pasturage and get rich?

A. Well, on account of the underbrush or salal and other stuff that they don't eat, or eat very seldom.

Q. Now, isn't it true that, if he was the only actual settler in the whole township and had the balance of the lands to pasture on, he might pasture it for two or three months in connection with the rest of the grant? Isn't that true?

A. One might. He might run a small bunch of cattle.

Q. Now, if the Oregon and California Railroad Company lands were open to settlement, 160 acres to each, could four settlers occupying each section make a living for themselves or their families, either by using the land for agricultural purposes or for grazing purposes?

A. No, sir.

Whereupon witness testified that Nichols, who owns some of this cattle, lives at Riddle, about thirty-five miles from where he runs his cattle. He drives them every year into that country—the range has gone this year, and this is about the last week for the sheep to return. They were turned out on the range some of them, this spring, and some of them wander up in the forest reserve. The only persons in the sheep business are Donovan Brothers, or James Donovan, at Myrtle Creek, who runs from 900 to 1500 head of sheep for a short time in the summer. He drives them up and takes them out. His first camp is eleven miles from Myrtle Creek; the last about thirteen miles. The sheep live there mostly on the poison oak, and grass browse, and pea-vine, mostly on pea-vine. They eat poison oak like a horse, and they like it. A horse will eat it more than anything else, that is, horse, sheep and cattle. They take the sheep up into these mountains and woods as soon as they can, in the spring after lambing, and they have taken them out this year already. They are up there about two months. They have a shepherd with them, one or two men, and dogs, and hold them in there. As soon as they start to shrink, and as soon as the pasture gets so it cannot support the sheep, they take them out. It would take four or five years for anybody to go in three and get any place in such shape that he could keep fifty or seventy-five head of sheep. They would be able to do that by slashing, burning, and sowing grass seed in the burns. On burned over land, or when land would be cut, after the timber was cut and the slashing

was burned, one can sow in the ashes in the fall, and get a very good stand of Italian rye, or orchard grass, or in the low swales, timothy, which will make very good pasture. Grasses would grow in patches on the land that he thinks could not be cleared and used for grazing purposes; that which would not be practical to clear; could be grazed all right that way. Grasses on that class of land, growing among the stumps, roots and trees, if one did not overstock it, could be grazed almost the whole year. It would be impracticable to take a quarter section of land as an actual settler, slash it all off and graze it, and be able to make a living with stock, because the cost of merely burning and slashing would be so much greater than he could buy open land for elsewhere, that it would not be practical. The chief value of this grant, from his standpoint and in his judgment, is for its timber possibilities.

Q. Did Mr. Underwood tell you what he wanted this statement, Government's Exhibit 117, for?

A. He told me that it was for the general character of all the land in those townships. He didn't mention the railroad grant.

Q. Was this written out by you or by him?

A. Written out by him.

Q. And how long were you in conversation with him?

A. Probably fifteen or twenty minutes at that time, about thirty minutes, maybe.

Q. And the definitions of agricultural land and of grazing land were discussed by you and him under the terms as stated by you?

A. Yes, sir. It should have been in there.

Whereupon, on recross examination, witness testified that this land in the grant is not of the same general character as his homestead. He spent a year looking around, practically, when he came here, before he could find a piece that he could homestead. It has mountains on both sides of it. It is not of the same general character and not the same mountain range. The highest point is 241 feet from the lowest point on his place. He has between twenty and twenty-five acres of cleared land. The homestead has cost him very nearly $4,000 to get in the shape it is in now, with his buildings. He is not connected with the Commercial Abstract Company, but testified that Mr. Van Ostrand, who is the president of the Neenah-Oregon Land Company, owns a half interest in the Commercial Abstract Company, and witness worked one winter, as he was drawing his salary from Van Ostrand; he worked a year last winter for the company in the office. J. D. Zurcher, who testified in this suit is manager of the Commercial Abstract Company.

Whereupon WILLIS VIDITO, being called as a witness on behalf of the defendants, and being duly sworn, testified, that he is sixty-eight years old, is living in Corvallis, Benton County, Oregon, at present, and has lived thirty-seven years in Township 14 South, Range

8 West in Alsea Valley. Until about nine or ten years ago he farmed and carried mail; he ran several mail routes in the Coast Range in years past; one eleven years, another sixteen years, and another three years, he thinks. He was assessor of Benton and Lincoln Counties forty-two and forty-four years ago, and was Justice of the Peace in Alsea Precinct, he thinks, about fifteen years. Alsea Valley, or Precinct, is now in Benton County. He is acquainted with a good portion of the unsold lands of the Oregon and California Railroad Company in Benton County, Oregon, and has lived in the vicinity of these lands for forty years, and handled all the chittam bark for the Oregon and California Railroad Company ten years ago. He is not working for that company at present and has not been this year. He was fire warden for that company in that range, he thinks, for about nine years. The company paid him and he looked after all fires in all that country; and thinks there was about 75,000 or 80,000 acres mapped out to him that he looked after during that time. In his younger days he hunted a good deal over these unsold lands and leased these lands for the company on shares two different years, for a per cent of the chittam bark, not less than one-third, or whatever he could get. There are various kinds of timber on these lands. To which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be deemed taken to all the testimony of this witness, relating to the character of the lands within the limits of this grant, settlements thereon and public

land entries thereof. Whereupon witness testified that the timber on all the high lands is nearly all common red fir, some Noble fir, and the lower lands along the creek bottoms, is alder, cedar, maple, vine maple, cascara and various other kinds of brush and small timber. This chittam bark is the cascara sagrada. There have been great quantities of that, but it has been pealed for some thirty odd years and there is very little of it left. The chief value of these unsold lands in Benton County would be timber, nearly the total value. There are many parts of this land that is burned land, that has nothing on but fern, that comes annually. Every two or three years, fire gets in and burns off hundreds, sometimes thousands of acres. No one ever took any trouble to seed it, and consequently there is nothing on the land of any value. The only thing that the soil of this burned over land could be used for would be when it burns over sometimes to sow it to grass, that you might get some benefit out of it in the way of range. The low lands of this burned land might be used in this way for range if one could get seed on it, but he has never heard of any one sowing any seed on this burn. He has insisted that it be done, that the people over there pool together and buy seed and sow these lands in order to have range.

"Q. Now, suppose that an actual settler, under this so-called claim of the Government that the company is under obligation to sell to actual settlers at the rate of not to exceed $2.50 an acre and in quantities not exceeding 160 acres, should take a quarter section, or apply for it and the company should let them have a quarter

section of this burned over lands upon which to settle and make a home, how would that man make a living on that piece of land?

A. There is none in Township 6, 7 nor 8 West and 13 South, 6, 7 nor 8 west, in 14 South, that anybody could make a living on, either Government land or railroad land.

Q. Why?

A. Well, it isn't of a nature that they could do anything with that quantity of. I took a claim in 1872, and I couldn't make a living on that, and it was the best, I think, that was available at that time, nearly forty years ago."

Whereupon witness testified that near the divide of the Coast Range, the timber is usually pretty heavy and has very few open spaces. Further west near the line of the company's grant, is less timber, a good deal of second growth, and where second growth timber now is about the right size for piling, but not old enough, there is absolutely nothing grows. He knows of one claim that the company sold before the lands were withdrawn by the Government, that would be a very good claim for agricultural purposes. Various parties have spoken to him about that claim at different times when he was in the employ of the company. They wanted to locate on it and he thinks that the company leased that land to get twenty tons of chittam off it after a good part of it had been sold. There is some good bottom land on it. It is situated in Section 7, Township 14 South, Range

8 West. He never figured on any per cent of the lands in Benton County that could be used for agricultural purposes or for any useful purpose other than for timber. There would be a very small portion of it that could be utilized for such purposes. There are thousands of acres of this land that do not have any undergrowth or pea-vine on. There is Oregon grape and salal brush growing on high ridges and some north hills of the low lands, but the only available substance for grazing would be these native running briars, which cattle live on when they range over it. Cattle could graze on the high lands during June, July and August. On the low lands they could run over it, and do, the year around. There is lots of these lands now in Township 13 South, Range 7 West, and there is not a living man on that whole township. In Range 13 South, 8 West there are no inhabitants in that township, either on the even or odd sections. The reason for that is, no one is fool enough to think that he could make a living on it. There was one claim taken in that township, which a man lived on, but he sold out to another fellow, who raises a garden there. There has been some logging done on it, but he don't live on it. There is not an inhabitant living in that township. These lands could not be used to any extent for pasturage purposes at all, in the present condition of the land. There are many benches in the lands of the company and on the even sections which, if cleared, would raise grass and might raise garden and fruit, but the expense of clearing would not justify any man to take them up, with the understanding that he would ever clear them

up. He has never had any experience or knowledge as to the cost of clearing these timber lands, this heavy timber land, in Western Oregon. He has had a few acres grubbed out of these creek bottoms, in maple and ash timber, which cost him about $80 an acre to clear up, which had never been slashed. There were standing trees here and there in the bottom land along the creek, not this big fir timber. He never heard of anybody trying to clear it by burning up the stumps or logs. It does not seen to him that any one would take chances on getting the odd or even sections of these heavy timbered lands, covered with merchantable timber and undertake to clear them. He finds that in southern Benton County, there is a good deal of land that is very rocky, close to the surface—no rocks in sight. He prospected for some mineral and found that the land is decomposed sand, rock, and wherever a tree grows and turns up, it throws up a lot of bed rock on much of that land. The land, if blown out, or where it is on low, wet land, the roots grow very shallow, and lay all on top of the ground, and those roots could be exterminated, and there is an awful lot of them, but on higher land the roots go deeper, the higher the land the deeper they go, and most of it is rocky under the surface. His knowledge of the root and soil character of this grant is confined chiefly to Benton and Lincoln Counties. He knows where the company's lines are, in Lincoln County and is acquainted with the unsold lands of the company in Townships 12 and 13 South, Range 8 West, and Townships 13, 14 and 15 South, Range 9 West. He became acquainted with

these lands and their character by looking after fires over various parts of the grant for the last ten years, by leasing out those lands for chittam, and has run lines dividing up sections, and hunted up the stakes, and knows all about it. Opposite 13 and 14 South, in Lincoln County, the company's grant only runs about a mile into that county, and there is but very little timber on the company's lands. It is second growth, what there is. Section 30, Township 14 South, has a good body of heavy old timber on it; but that is the only section along the line there of the company's grant in Lincoln County that has any timber on in 13 or 14 South. There is a little timber on section 30, in 13 South, that is good timber. Where the character of the land has no merchantable timber on it at present, there is an undergrowth of fern, salal, vine maple and cherry, and all that kind of thing. On Section 21, 13 South, the elevation is 3,700 feet. There is some pretty fair soil on that summit. It is grass land; and also in 15 South, there is a mountain range there that contains some prairie grass on it. He does not know of any of the unsold land in Lincoln County that would be valuable for agricultural purposes.

"Q. What per cent would be available for pasturage purposes, to a man who would go there and settle, and take 160 acres?

A. Oh, it would be worth something to him, because, as I say, the cattle runs all over that country. It makes no difference what the distance, nor how high it

is. They pick out salmon berry leaves on the creek bottoms, and salal, and fern, and running briers, but the briers, on the most of that country, is the only pasture there is. There is no grass—no native grass.

Q. I mean, suppose a settler would go in there and buy 160 acres, take a homestead of 160 acres, expecting to make it his home, and be confined to that piece of land to make his living, either by pasturing stock or any useful avocation relating to agriculture or horticulture, how would he get along?

A. He would be caught.

Q. He wouldn't, then, be able to make a living on the place at all?

A. No, he couldn't make a living for a family on a piece of land, unless he had money to squander and live on.

Q. I mean out of the land?

A. No, he couldn't make it out of the land. I never have advised anybody, in years past, not in the last ten or fifteen years, to ever take a homestead. I knew where there was vacant Government land, but I couldn't recommend anybody to take it.

Whereupon witness testified, that he knows of part of the even sections within the limits of this grant, where the land is chiefly valuable for timber, which had been taken under the Timber and Stone Act, and thinks that most of it was taken for this cascara bark, and after they peeled the bark off they threw the claim up, and all

that Government land was filed on along the line between Lincoln and Benton, about eight or nine years ago, and he does not think that there is any one of them living on those claims today. They were just simply vacated. He thinks only one man perfected his title. There is no one living on these homesteads taken in the last twelve or fifteen years. The homesteads were sold to timber syndicates. Some of them had cleared up five or six, or ten acres, that is, they had cut off the timber and sowed grass, and burned up part of the logs; they had timber enough on their claims, so they sold out for a good figure, and just simply left, vacated, and the timber owners own it now. Nearly the entire value of the unsold lands of the company in Lincoln and Benton Counties, consists in its timber. Whereupon on cross examination, witness testified, that he has been during the last fifteen or twenty years employed considerable in connection with these lands; during the summer time as fire warden, and during the summer season for two or three months by the Oregon and California Railroad Company. The company never tried to do anything with that chittam bark for the past eight years, he thinks. He looked after it while he was in the office, during the summer season, and tried to see that none of it was stolen off the lands; but the company never ordered him to lease out any of it, or make anything out of it. He was employed as fire warden in the summer time up to a year ago; and patrolled for the Government this season. He was fire warden, commissioned by the State Board of Forestry to patrol in the

North part of Benton County this season; that is, fire guards that the appropriation provides shall be expended by the State for fire protection. He ran a good many lines of these sections, most of them in the western part along the line between Lincoln and Benton Counties. He would sell a forty to a party for the company for chittam, and another forty or half section of the same section to somebody else, and he had to run a mile through the section, and pace it out, and give them their territory to work on. The Oregon and California Railroad Company showed these lands to him in Township 13 South, Ranges 6, 7, 8 and 9 West; and Township 14 South, Ranges 6, 7, 8, and 9 West, and the county line is a mile and a third south in 15 South. The maps the company furnished him in later years only authorized him to go to the county line, which was the south line of 15 South, and as far as the grant went west. Those are the lands that he has been more thoroughly over than others. He has just a general knowledge of the other lands. He is better acquainted with the western part than he is along the divide. There is no chittam bark on that divide, and when he was interested in working on those lines, it was the western part, along the line of Lincoln and Benton Counties. He has worked as fire warden on all of these lands in Benton County, he thinks, that is, there hasn't been fire on all of them, but he has been over all of them during that time. That is true, also, as to the grant in Lincoln County, it only runs about a mile along there. Whereupon on re-direct examination, witness testified that he thinks he has gone

over the lands, within the limits of the grant, in both of these counties sufficiently to enable him to tell whether they are timber, agricultural or grazing lands.

Whereupon **DENNIS McCARTHY** called as a witness on behalf of defendants and being duly sworn, testified that he is forty-six years old, resides at Marshfield, Oregon, and is a timber cruiser and that he has resided in Marshfield, Coos County, Oregon, eight years and has been cruising timber most of the time. He was in the employ of the Simpson Lumber Company when he did the first cruising in the county. He cruised for outside companies that bought timber there and the last four years he has been in the employ of the county. For timber companies, his duties were principally estimating the amount of timber on certain tracts of land and in cruising for the county, his duties were estimating the timber, classifying the land as to its soil and whether it was adapted to grazing or cultivation, etc. He also ascertained whether the land was chiefly valuable for timber. In cruising, one starts in, at the corner of the section or whatever the land is, he is working on and runs through the land. It is according to whether it is heavily or sparsely timbered. They aim to go through the timber so as they can see the whole of the timber or whether or not the land is all timbered or not and either count the trees or average it up by the acre. Where the timber stand is uniform they generaly average it up by the acre, count the number of acres on a certain tract and average up the balance, if it is uniformly timbered. In cruising for timber companies, who are either appli-

cants to purchase or wish to know the contents of their timber holdings, he uses the same methods of cruising. They ascertain the number of trees, by either counting all the timber or a certain number of acres and averaging the rest and then get the size of the trees by measurement. They generally measure down timber in order to get the size of the trees and then once in awhile the standing timber, the diameter of the stump and take that as a guide, take the down timber, giving it the same contents as they would a down tree of the same diameter. He did not use very much these volume tables. He generally used tables that he had made himself from actual measurement of timber that was down, or in logging camps where they were cutting and measuring up a certain number of trees and made a memorandum, kept a book for that purpose. He is familiar with and carries Spalding's and Doyle's rules and several of these tables and scales used by loggers and others. He understands how to triangle and obtain the heighth of trees but they never do that, they generally take the down timber and use that as a guide to the length of the trees. These methods are the most accurate that one can get, because they take actual measurement of the down timber in the same vicinity they are cruising. Timber investors buy or sell right along always on his cruises. The Simpson Lumber Company is a large corporation, has sawmills in Coos County and has been operating there for fifty years. The sawmill is at North Bend on Coos Bay. The Company has two mills, one has a capacity of about 100,000 feet a day of ten hours and the

other about 50,000 feet, he would think. There is only one more sawmill at North Bend manufacturing lumber —he believes California men own it now. It was built by some local men and he believes they sold out. It is only a small mill of about 50,000 capacity. He cruised all of the timber holdings of the Simpson Lumber Company about eight years ago. He believes that "Defendants' Exhibit 314" is a fairly good map of that section of the country. The red color on the map is the Simpson Lumber Company's lands and he is able to identify them in a general way from his actual knowledge of where these lands are on the ground. He recognizes them all. Most of these lands of the Simpson Lumber Company are steep mountain lands. The north of the map is in Douglas County. The lands in Douglas County in township 22 north, range 12 west, are all high steep mountain land. He does not know how many acres the Simpson Lumber Company owns in Douglas County. There are approximately 4,000 acres in that county, to all of which testimony complainant objected as incompetent, irrelevant and immaterial and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, the settlements thereon and public land entries thereof.

Whereupon witness testified that the Simpson Lumber Company owns about 24,000 acres in Coos County which are chiefly valuable for timber. He is acquainted with the C. A. Smith Lumber Company transacting

business in Marshfield, Oregon, where they have two large sawmills, one of the capacity of 300,000 feet board measure in ten hours and the other about 150,000 feet. He could not say accurately but the volume of lumber manufactured and shipped by the C. A. Smith Lumber Company from Marshfield, which comes from the timber on the water shed west of the Coast Range in Coos County, must be something over 100,000,000 feet a year—it is more than that, he does not know how much more it would be. He could not say how much money that company has invested in these mills and timber holdings in Coos County. It is a very large enterprise. He has been through the mills of the C. A. Smith Lumber Company and over a great deal of its timber lands. The bulk of the holdings of the C. A. Smith Lumber Company is in the southeastern part of the county and he thinks this company owns about 70,000 acres in Coos County. Some of these lands are within the limits of the Oregon and California railroad grant, heretofore purchased from the Oregon and California Railroad Company. The Simpson Lumber Company owns in Coos County about 24,000 acres. The Menasha Woodenware Company, of Menasha, Wisconsin, owns a large tract of timber formerly owned about 20,000 acres and has recently purchased another large tract there of about 70,000 acres and it has pretty close to 100,000 acres there all together. These timber lands of that company are mostly all mountain lands, principally fir timber which is the principal tree in Coos County and western Douglas County, with a little scattering hemlock and

cedar. Weyerhauser Timber Company is the next largest owner of timber lands in Coos County, owns about 25,000 acres in that county. He does not know the extent of its holdings in Douglas County. It has a large tract there. The holdings of the Weyerhauser Timber Company in Coos County are all heavily timbered mountain land. He has cruised part of the unsold lands of the Oregon and California Railroad Company in Coos County. He thinks they have cruised about 60,000 acres of them up to this time. His knowledge of the balance of these lands is just a general knowledge. He has been through the townships in which they are situated but has not cruised these townships yet. He has been sufficiently over them to be able to state, in a general way, the general character of the rest of these lands. So far as he has been through the unsold lands of the Oregon and California Railroad Company in Coos County, they are mostly high lands, heavily timbered lands, as far as he has seen them and he has actually cruised about 60,000 acres of them and these were all heavily timbered lands, and as to these that he has not specifically cruised but traveled through or over, they were chiefly timber and most all high mountain land. These unsold lands are nearly all steep mountain slopes, gulches and generally rough country. In their present state, he would not consider, that any of it would be available for agricultural or horticultural purposes and it is so heavily timbered that it would not be practical to clear the timber and cultivate it. It would not pay, he thinks, any part of it, to clear the heavy timber off

of it and cultivate it and their chief value is timber. There is a small portion of this acreage where, if the timber was cut and removed and the lands grubbed or the roots taken out, it would be plowed or tilled but whether it would produce anything to pay or not he could not say—there would probably be five per cent of it, the slopes would be easy enough or level enough to plow or till—there would probably be five per cent of that, after the timber was cleared off, that would be available for agriculture, providing it would produce crops. He does not know about that. These lands are generally about the highest elevation of any lands in the county, from 1500 up to 3000 feet, some more than that. In some places where this timber would be, that might be removed, the soil is fairly good clay soil, but the land is generally all rocky. The soil in some parts of it is very good—good clay soil, good clay loam. There is not any of it in its present state that he knows of that would be susceptible to grazing. If the timber was cut down and removed and the stumps cleared and grass was sown in the ashes, after the clearings were burned, there would probably be, perhaps fifty or sixty per cent of it that would be so as stock could range over it, if it would grow grass. He does not know as to that. What he means is, that it would not be so steep that stock could not go on, probably sixty per cent of it that stock could range over and feed on. Whereupon witness testified.

Q. Suppose that a settler would come to the company and say, "Here, I want to pay not to exceed $2.50

an acre for 160 acres of that land out there, and I want to make a home on it—I want to settle on it," and the company should sell it to him, from your knowledge of this grant, I wish you would state to the court whether or not such settler would be able, confining himself to the particular quarter section, however he might select it, to support himself and his family, make settlement there, by any means, either for grazing what few stock he might have on it, or devoting it to agricultural or horiticultural or any other useful purpose?

Q. You may answer.

A. I don't know of any that would be available or practicable for a settler to go on and make a living.

Whereupon witness testified that there is very little settlement on the even sections within the limits of the grant in Coos County. There is scarcely any settlement on the lands. There is very little evidence of any settlement. Most of that land has been taken under the timber and stone act or with scrip. The title, after it passed to the entryman, has most all passed into the hands of some of the large timber holders. These even sections that have been thus entered are all heavily timbered lands. There are scarcely any remaining even sections within the limits of the grant, not entered. It has been most all taken up with the exception of a few spots that have been burned, an old burn. What has been burned is mostly vacant and still public land. Most of these even sections within the limits of this grant in Coos County have nearly all been taken under some law of the United

States, mostly under the timber and stone act and when the entry was completed and title vested in the entrymen the lands have all passed substantially to timber investors. These lands owned by these various timber companies in Coos County, including the timber lands outside of the grant towards the Pacific Ocean owned by these various timber companies, the C. A. Smith Company and the Simpson Lumber Company and other timber investors, is most all very heavy timbered country and compares very favorably in the estimation of timber men with timber elsewhere in the State. It is considered just as good as any part of the State he believes. C. A. Smith, he believes, came from Minneapolis, Minnesota. Witness has made a few trips into Curry County, and has passed through some of the timber lands in that County. He does not remember that he has passed by or been on any of the unsold railroad lands in Curry County. He has been in township 31 south, range 12 west, which is partly in Coos County, but knows that, only in a general way, he has not cruised that township yet. He has been some on township 34 but has never been in township 35, range 11. He has been in the north third of township 31, range 13. The general character of those lands that he has visited or seen in Curry County is that they are all on high hills, steep, rough country, and the timber is fairly good there. The land's chief value, as far as he has seen, in Curry County was for timber. He could not see any that was available for agricultural purposes. He has been cruising for Coos County four years to arrive at the valuation of the

lands for assessment purposes, to classify and value the lands as for assessment purposes.

Whereupon defendants offered in evidence "Defendants' Exhibit 314" to which complainant objected as not properly identified, which was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such.

Whereupon witness testified that he is personally acquainted with Charles A. Smith of the C. A. Smith Lumber Company and has been at all the camps of that Company, but could not say as to the number. The Smith-Powers Logging Company is C. A. Smith and Mr. Powers, residing in Marshfield. That company logs for the Smith mills. He has seen the publication called the "American Lumberman," published at Chicago. It is considered the best publication in the timber interests that there is, on the Pacific Coast or elsewhere in the United States. A photograph on the front page of the issue of November 11, 1911, of the "American Lumberman" is the photograph of C. A. Smith, he believes, and he recognizes that document as the "American Lumberman" of November 11, 1911. The photograph or picture shown at page 48 looks like that country in a general way, but he cannot see any particular marks that would show it was taken in Curry County for sure, but he can see that it is a forest country just the same as it would be. They have plenty of that kind of timber shown at page 49 of this magazine. The tim-

ber where the man is standing between the two large trees seems to be a fairly good stand of timber for that locality. He has seen a good bit of the Port Orford Cedar in Curry County and the picture at page 51 is a good picture of the Port Orford Cedar. The picture at page 53 looks as though it might have been taken in that country and he has seen such trees as those of that timber shown on pages 54 and 55, and the picture on page 55 is a good picture of the spruce timber growing in that country. He has cruised all that spruce timber where the camp is situated. They cut such timber as that shown at page 59 of this publication. They cut a good deal of that high timber there of that heighth. The picture at page 61 is a good picture of that section as also the picture at page 63 which is a fairly good and typical illustration of what is on the ground after the timber is felled. The picture at pages 64 and 65 correctly represents the situation as it actually is. He recalls a large number of young men that were sent out to take lessons in forestry and reproduction of forests from some of the forests of Coos County, but he does not recall where they came from. He knows there was a large number there, this year. The map at page 66 is a good map of the timber holdings of the C. A. Smith Timber Company in that part of the country and the picture at page 67 seems to be a good picture of that forest country. The profile map or panoramic map at pages 68 and 69 looks as though it was a good picture of that country in general outline and he has seen such timber lands in that section as shown on page

70 of this publication which seems to be a good photograph. He recognizes the picture at page 73 as a picture of camp 5 showing the operations of the C. A. Smith Lumber Company, or logging company, and of the yarders as they call them and has seen such works, there a good many times. He has been in the mill of the C. A. Smith Lumber Company at Marshfield and the photographs at pages 87, 88, 89, 90, 91 and 92 of this publication seem to be good, true photographs of that mill. He has been at the yard shown on pages 94 and 95 of this publication and it is a good picture of that yard as it was at the time the picture was taken. There is not so much lumber in that yard at the present time. The picture at page 99 is a good picture of portions of the timber there of the C. A. Smith Timber Company. He recognizes these pictures relating to the mill and the timber lands of the C. A. Smith Timber Company and has seen this before. They are good pictures. He recognizes the picture on page 111 of the modern steel steamship "Nann Smith," owned and operated by the C. A. Smith interests. That ship is still operating there.

Whereupon defendants offered in evidence all parts of this publication recognized by the witness and particularly all of the article describing the C. A. Smith Lumber Company and its interests at Marshfield, Oregon, in Coos and Curry Counties, Oregon, to which complainant objected as incompetent, irrelevant and immaterial and not properly identified, excepting the photograph of C. A. Smith and the C. A. Smith lumber-

ing plant at Marshfield and the vessel "Nann Smith" mentioned by the witness, which exhibit was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such.

Whereupon, witness further testified upon cross-examination as follows:

Questions by Mr. Rabb:

Mr. McCarthy, you testified in relation to some of the photographs in Defendants' Exhibit 315?

A. Yes, sir.

Q. Now, so far as the photographs of the lands are concerned, you cannot identify those lands as being Coos County lands, can you?

A. No, not as——

Q. They may be in Bohemia somewhere?

Mr. Fenton: Read that question and answer. He interrupted him.

Question and answer read.

Mr. Fenton: Now, I would like to have your answer.

A. Some of the pictures of the timber land, might be taken in other parts of Oregon and show just about the same, but we have such timber there as is in all those pictures.

Q. You don't mean to identify those photographs as photographs that were taken in Coos County?

A. I don't suppose any one could do that. No one

could do that, you know.

Q. You didn't take the photographs?

A. No, I didn't take them.

Q. And don't recognize the places as places that you are acquainted with?

Mr. Fenton: Object to that because it is not divided. The witness says he didn't take the photographs, and he could answer that No. The other part of it is another question, as to whether he recognizes any of the spots that those photographs show—logging camps, etc. You may answer.

A. Well, there's some of them I can recognize the places. But in the standing timber, where there isn't anything but the standing timber, of course, that I couldn't do—recognize the spots.

Mr. Fenton: Speak a little louder.

A. Where it is pictures of the standing timber, I cannot recognize any particular objects in the pictures that I could say positively they were taken there.

Mr. Rabb: I move to strike out the exhibit from the record as improperly identified, witness not being shown to have knowledge of the matters contained and stated—of the photographs shown by this exhibit.

Mr. Fenton: Counsel for defendants give notice that they will call another witness to further identify these photographs as being photographs of what they purport to show timber lands of the C. A. Smith Lum-

ber and Manufacturing Company—and that these are all places in Coos and Curry Counties.

Whereupon witness testified that he had lived in Oregon eight years, residing in Minnesota and Montana before coming to Oregon. He lived about ten years in Minnesota and worked in the timber camps for awhile first and then started timber cruising there. He was employed in Minnesota by different companies,—The Musser-Sauntry Lumber Company. He was raised on a farm and worked in the timber woods more or less all his life since he was able to do anything. He was raised in New Brunswick, Canada, which is a timber country. The farms in his native country were farms that had been cleared. Timber had previously grown upon the lands. The O. & C. lands that he cruised in Coos County were all high mountain lands. He cruised first in township 24, 25, 26, and 27, range 10 west; township 26 south, range 9 west, west half of that township; township 29 south, range 9 west, all of that township; township 21 south, range 10 west, what lands the company has in that township; two sections in township 26 south, range 11 west, he believes a little more than that—that is about all he guesses. These lands are on the west of the Coast Range. Practically all of the timber lands in that section are owned by large timber companies, both in the even and odd sections. He cannot recall any particular pieces of the lands of the Oregon and California Railroad Company in Curry County that he has been on. He only knows the general character of the formation of these lands and all

the lands there in Curry County are up on high, rough, hilly ground, very rough country there, aside from little valleys. He does not base his knowledge as to these lands solely upon his knowledge of the lands in Coos County. He has been through Curry County and may have crossed over some of the railroad lands in Curry County, but he could not recall any particular quarter section or anything of that kind, that he has been on; in a general way he knows these lands. All the lands in Curry County aside from the little strip along the coast are very high and mountainous and rough. He has never been over these lands in Curry County that are involved in this suit. He has been through the country enough to know what they are, in his opinion. He did not testify that he had never seen these lands, only in a general way. Vegetation grows very heavy thereon. All the lands on the western slope of the Coast Range are very prolific in their growth of grass and trees and vegetation grows very heavy there. On the low bottom valley lands along the rivers grasses and crops of all kinds grow well, but in the timbered area there, there is practically no grass growing in the timber. The timber is too heavy and dense for any grass to grow. He does not know whether the heavy growth of timber prevents its growth but the grasses do not grow in the timber there as it does in other places where he has been. The entire country in Coos County was originally most all timber. Along the bottom lands the heavy fir timber did not grow as it does on the mountain tops. It was more of myrtle, maple and alder and such timber

as that, which is not merchantable timber as a rule, growing mostly on the bottom of the Coos River and the Coquille River and is not merchantable timber, as a rule, it is a different class of timber, different soil. There is nothing in the formation of the soil that would prevent vegetation or grasses growing on these lands involved in this suit, on parts of them the soil is fairly good, where it is not too rocky, on the high mountain slopes some places there is nothing but bed rock, there is no soil on them, other places are very rocky, such as boulder rock and some of these townships, for instance in township 27 south, range 9 west it is not altogether a lava formation, but is something similar to that and the soil is very rocky. There isn't practically any soil on it. It is all a small shale rock. This is in township 27 south, range 9 west. It is very heavily timbered down there. There are parts of the land that he has cruised that is good soil. The soil is good wherever there is soil that is not too rocky. It does not always take good soil to raise good timber because one will see very large timber growing practically on rocks. They root almost on the bare rock. This large timber grows on almost barren rock, in some places. He is acquainted with the newspaper called 'The Coos Bay Times, Marshfield, Oregon," and it is a paper of general circulation in Coos County. The photographs in that paper indicated as "Coos County Strawberry Field" might have been there. They raise strawberries there and there is some timber there in the background of the strawberry patch. He cannot tell from that photograph whether

it is heavy timber or not. It may not be saw timber. The photograph "Pear Tree in Blossom" might have been there, they raise some pears there, not very much. They do not raise them to a very large extent. In places there are pears. He recognizes the photograph "Anson Rogers' Beautiful Farm Home on South Coos River" in this same paper as the home of Mr. Rogers in Coos County. It looks very much like it anyway and is a photograph of his home farm there. He cannot recognize the photograph "Another Coos County Farm" in this paper as any particular farm, but it might have been there. There are such places. He recognizes in this paper the photograph "Panoramic View of Stephen Rogers' Farm" as a photograph of Mr. Rogers' farm in Coos County and he recognizes the photograph "Myrtle Lodge, Home of Mr. and Mrs. F. E. Rogers, on the South Coos River" as the photograph of the home of Mr. and Mrs. F. E. Rogers. There is timber back on the hills back of the farm, as shown by the photograph, and there is some growth of timber or what appears to be perhaps logged off land, but there is no land cultivated that was logged off. There was some they used for grazing land on the hillside there on the slopes. It is fair grazing land on the lower slopes. The photograph in the lower left hand corner on the same page of this paper entitled "Coos County Farm Scene" he recognizes as a farm scene in Coos County. It might have been there and the photograph "Panoramic View of Stephen Rogers' Farm" looks something like dairy farms down there.

Whereupon complainant offered said paper in evidence marked "Government's Exhibit 118" which was received and so marked and is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such.

Whereupon witness testified that he does not know exactly the population of Coos County. It must be somewhere about 12,000 he thinks. The average price of the good bottom lands in Coos County along the river is somewhere about $70.00 per acre. He believes they ask higher prices than that for some of it along the rivers. Dairying, farming, fruit growing, lumbering, coal mining, market gardening, cattle and poultry raising are all carried on to some extent in that county, he believes. He has been a timber cruiser for the last fifteen years and has examined lands largely for big timber companies who were not interested in obtaining agricultural land. They do not want agricultural lands. In working for these timber companies he examined a piece of land with reference to the timber. They must always report in making cruises on the possibilities of the land, whether it is suitable for agriculture after the timber would be removed from it. He cannot recall, only in a general way, to what timber company he ever made a report on the agricultural possibilities of the land after the timber was removed in Coos County, he generally put it in his reports of any land that he ever examined, the character of the land and made a topographical map of the lands that he examined. He always has done that. At times he may not have done it. The

principal thing in cruising lands for logging companies, examined by him was to examine as to the timber and the logging facilities only. He did not consider the agricultural value of these lands he examined in Coos County while he was working for the logging and timber companies so much as they do now since he has been working for the county. In a general way the topographical map always shows the slopes, whether they are high or steep. Most always he made out his report whether the land was suitable for agriculture or grazing after the timber would be removed, or whether it was very high, rough and rocky. He is not speaking of the county, but in a general way, all estimtaes that he made or ever made. He made written reports. As to all the land he cruised for the Simpson Lumber Company he made topographical maps of each forty acres. In a general way he believes that the reports will show whether it was agricultural land or not. He cannot say that he specifically reported whether each subdivision was suited for agriculture or not, he could not say in that report. He was not so particular at that time as he is now. Whereupon witness testified:

Q. Don't you know, as a matter of fact, Mr. McCarthy, that the Simpson Lumber Company was not interested a particle in the agricultural character of that land?

A. No, that wouldn't make any difference. A cruiser's report should show that anyhow, if it is right.

Whereupon witness testified that in making his

cruises for the county his reports show whether the land is agricultural land and he classifies that in its present state and shows whether it will be suitable for agricultural or grazing lands, or whether it might be, after the timber would be removed—that is shown on each forty acre tract in a place provided for in the report by itself aside from the timber in the report blank. In the report blank, there is a place for inserting whether it will be agricultural land when the timber is removed. He worked some for other timber companies besides the Simpson people. He cruised some for C. R. Smith, the Menasha Woodenware man, but was not with them very long. He picked up some timber for them, sold some timber to them, but not very much. He did not sell them any logged over lands, he sold some lands of the Simpson Lumber Company, part of which had been logged over. The Woodenware Company understood that part of the lands sold to them was timber, but they did not understand that all of the lands that they purchased were timber. They had their own man cruise the lands. Their own cruiser came there and cruised the lands. He cruised the lands first but they sent a man there before they closed the deal to cruise it. They had two or three men on it of their own. There is considerable agricultural land around Myrtle Point and there are several little towns down in Coos County. Myrtle Point is somewhere near or in township 29 south, range 12 west, but he does not exactly remember without looking at the map. There is no railroad running into Coos County from the outside. There is a short local railroad

from Marshfield to Myrtle Point. Transportation coming in from the outside is only by water. Title has passed from the Government to practically all of its lands in Coos County there, the even numbered sections. There is very little vacant Government land in the county. Most all of that was taken before he came into the county. There is a little agricultural land around the town of Sitkum, in Coos County. There is not any land that would be very easily cleared and cultivated in the eastern part of the county. There is a little strip in the valley along the Coquille River at the town of Sitkum in township 28 south, range 10 west. It is a very little narrow strip. Bridge is in township 29 south, range 11 west, somewhere near there. He has never cruised very much right around there near Bridge. There is a little strip of valley along the river where there is some agricultural land. He does not know where Bancroft is. It is a little postoffice station. He does not think there is any town there, but he does not remember ever being there. He knows there is a place called Bancroft there somewhere. He knows Gravel Ford, there is some agricultural land around there. There are a good many streams running through Coos County, branches of the Coquille River. There are not many that run into Coos Bay except the Coos River. There is some agricultural land down close to the mouth of the streams. There is considerable bottom land but after one goes up a certain distance, the valleys are very narrow, just narrow strips. There is quite a little bottom of agricultural land along the east fork of the Coquille River down there at Gravel

Ford. There is quite a little bottom of agricultural land in the northern part of Coos County north of Myrtle Point. In the timber area, there is scarcely any range, there is considerable range along on the east branch of the Coquille. The timber is too thick. The grass does not grow and cattle do not range on the northern part of the county at all.

Whereupon upon re-direct examination witness testified that he started four years ago in April cruising the timber lands of tax payers in Coos County each year for the County of Coos and put in all the time for two years and practically ever since, with the exception of about three months last winter. He found out who owned the lands by generally checking from the records or sub-divisions, generally checked from the records in the Court House and marked off the sub-divisions and the owners, generally had a map of the owners, ownership maps of all the townships in the county. The county did not furnish him an ownership map, he made these maps generally himself from the records. The county made an assessment of these lands to the owners each year based upon his cruise. He thinks 60,000 acres of the unsold lands of the company in Coos County would be very near what he had cruised, it might not be exactly that. While cruising these lands and the other timber lands in the county, he became, in a general way, familiar with the other part that he did not cruise. A couple of townships that the company had lands in, that he had not done very much in, he has not cruised them by forties. He has a sufficient or general knowl-

edge of the part that he did not cruise, he had been over it more or less, and had such general knowledge as would enable him to make a fairly good estimate of the character of the soil, of the timber on the lands, and its general conditions. Coquille and Coos Rivers and other short streams are heading, with their branches, in what they call the Coast Range of Mountains, the west slope of the Coast Range. He would guess that Coquille, the County seat of Coos County in a straight line, is about eighteen miles to the mouth where is empties into the Pacific Ocean. Myrtle Point, on the Coquille River by railroad, is about thirty miles from Marshfield, and Coquille, the County seat to Marshfield by rail is about eighteen miles, and he thinks they call it nine miles from Coquille up to Myrtle Point. He thinks that Coquille has about 1,200 people and Myrtle Point about 1,500. Myrtle Point is the last town of any size on the way from Marshfield, by way of Myrtle Point to Roseburg. After one leaves Myrtle Point going east he has to go by stage or mountain road to reach Roseburg through the Coast Range.

Q. "What is the fact, if you know, as to whether or not practically all of the argicultural, dairying and fruit lands of Coos County are situated on the bottoms of the Coos River, the Coquille River and other streams leading into the Pacific Ocean or into these streams, in the western part of Coos County and outside of the limits of the grant?

A. Yes. All the land that is cultivated in Coos

County is practically on the river bottom."

Whereupon witness testified that these are all west of the west boundary line of this grant involved in this suit that he knows of. He does not know of any that is not. He thinks this "Government's Exhibit 118" "The Coos Bay Times, Marshfield, Oregon, Evening Edition" was published sometime in January, 1912, or early last winter. The photograph "Anson Rogers' Beautiful Farm Home, on South Coos River" is on tide water of the Coos River. The tide does not ebb and flow over these lands that are shown that appear to be diked in that picture. That tide land or tide stream must be about fifteen miles from Marshfield; from the Pacific Ocean to the mouth of South Coos River is about six miles by water. South Coos River empties into the Coos River about ten miles from Coos Bay, right below that Anson Rogers' farm shown in that picture, a short distance. Marshfield is on Coos Bay. Coos River empties into Coos Bay. South Coos River empties into the bay right west of Marshfield on the east side of the Bay. Marshfield is situated on the west side of the bay. The character of this land showing the beautiful farm home of Mr. Rogers is what they call the bottom land of Coos River. It is not tide lands. Most any kind of grass grows on it, but he could not say whether it grows before it is cultivated. The "Panoramic View of Stephen Rogers' Farm" is right across on Coos River a short distance above the Anson Rogers place shown in the picture. There is no tide water running through this farm of 740 acres with 220 acres in cultivation described

in the article. The tide ebbs and flows in the stream that runs through this land. The heighth of the tide there is ordinarily about seven feet at this point where these farms are. These farms must be ten miles away from the western boundary of the line of this grant to the nearest point. There are no wagon roads hardly on Coos River, and it would be about the same distance by wagon road to the nearest west boundary line of this grant, from the nearest point of these farms. There are really no wagon roads on Coos River above tide water. They go by boat or launch and the transportation is most all by launches on the tide water of these streams. Above these farms the valley narrows down to a small gorge and there is scarcely any bottom land above tide water in Coos River. The Coquille River empties into the Pacific Ocean south of Marshfield and there are small river steamers running from Bandon to Coquille City. There is tide water in Coquille River above Coquille City, but he could not say what the ebb and flow of the tide is as far up the river as Coquille City, it must be four or five feet, probably more than that. The tide affects the waters of the Coquille River as far east as Myrtle Point. Myrtle Point is very near the limit of tide water, except in very high tides. These farms and dairy ranches and fruit farms lie outside of and west of the grant, towards the Pacific Ocean. Sitkum is a ranch farm house and a postoffice there and has a population of probably ten or twelve, along there. He could not say how long it has had a postoffice, but thinks it had a postoffice when he came to the county. There

are no stores there. There is no place of business there, only the stage station. The man that runs the stage between Roseburg and Marshfield keeps his horses there and has a ranch there. They keep stage horses there and change horses there. This stage line runs the whole year, but there is a part of the year they have to use pack horses instead of wagons on account of snow and bad roads, more particularly the snow on the mountain range, from Sitkum to Roseburg. There are two stage lines from Coos County to Roseburg, one from Coos to Roseburg, and the other from Myrtle Point. The stages pass over what they call the Coast Range of Mountains. Capa Arago Lighthouse Bridge is right west of Marshfield and below the mouth of the entrance to the harbor of Coos Bay. This Coos County Strawberry Field is not within the limits of the grant. The picture of the Coos County Dairy Scene is a tide water scene. The milk is transported from these dairy farms to the creameries and cheese factories on Coos River by these launches. On Coquille River they probably do a little dairying above tide water, on the smaller bottoms along the streams but on Coos River the transportation is all practically done on tide water by launches. There are several cheese factories, there are two or three places perhaps more that manufacture cheese in Coos County. There is not any particularly large cheese factory there that he knows of. Any of them that he knows of are on tide water. There is one on Coos River on what is called Catching Inlet, a branch of Coos Bay and one over on the Coquille River on tide water.

Whereupon on re-cross-examination witness testified that Coquille River empties into the ocean. There is not any bay there, he believes that it runs over into Myrtle Point, in township 29 south, range 12 west, and then there are branches extending out eastward into Douglas County and south into Curry County and east over the edge of Douglas and Coos Counties and that is the east branch last referred to. He is acquainted with Bridge, situated in township 29 south, range 11 west, and there are some ranches right along there. He thinks Bancroft is a postoffice, but he cannot locate that—he knows there is a place of that kind there somewhere. Etelka is in township 31 south, range 12 west, and there are some ranches there along the south fork of the Coquille River. All the ranches on the Coos River side on the Coos Bay side are practically all on tide water. There are other ranches in the western part of the county on the Coquille side on branches of the Coquille River. There are small bottoms that run up above tide water, very narrow bottoms on most all of the branches. These people would naturally build their cheese factories down at tide water in order to market their cheese. He supposes the transportation facilities on the Coos River side are practically all water. On the other side there are roads running up to all the ranches so far as there are ranches on the river. It is water transportation on Coos River. They would naturally put a manufacturing industry of any kind down near the shipping point, that is where all the ranches are on the Coos River, they would naturally put them there. All the ranches on the Coos River side on

both branches of Coos River on Coos Bay in the valleys running into Coos Bay are on tide water. On Coos River they are all on tide water. On Coquille River a large majority of them is on tide water. These are bottom farms, that is, referring to these Coos farms and on the Coquille side. The ranches around Bridge and Bancroft, Myrtle Point and Sitkum, are on bottom lands and have very little hill lands. Sometimes they clean off a small piece of the side hill for grazing or something of that kind, but they are practicaly all bottom farms in the County. These are not tide farms on tide water around Bridge or Sitkum. Tide does not extend into eastern Coos County or around Sitkum or Bridge. There is not very much tide at Myrtle Point. That is just about the head of tide water, it just raises a little there, the tide varies there at different times of the year, he is acquainted some with the variation in the tide but cannot recall the exact figures. There are three stage lines running over into Coos County, one from Drain and two from Roseburg. The one that runs from Roseburg by Sitkum runs only part of the year, they have quite a high range on the road. There had been no serious accident on the stage road by way of Sitkum but the serious accident had been on the Myrtle Point road and it is not the condition of these roads more than it is the snow, that prevents these stages from running during the winter time. The Myrtle Point stage runs all the year round from Roseburg into Marshfield, part of the time in the summer it is an auto stage. The Drain stage runs all the year round, it crosses over the Coast Range but

not so high as the Roseburg line. The Drain route follows the valley of the Umpqua River down to the Coast. There are quite a number of ranches along the Umpqua River right in the valley on the bottoms. The Coast Range varies from place to place, some places the divides are lower to get over than in other places. The Coast Range averages about 3,000 to 3,500 feet in altitude in places, that is, the divide will average that. He does not mean that that would be the altitude from tide water of the divide, the divide is broken and is not continuous.

Whereupon upon re-direct examination witness testified that the stage line from Drain to Marshfield goes down to Elkton, down the Elk Creek, a branch of the Umpqua River, and then follows the Umpqua River to Scottsburg, and at Scottsburg the passengers are transferred to a boat and taken to Winchester Bay, on the Pacific Ocean, and at that point the boat is abandoned and a stage takes them up, and the passengers are carried by stage on the beach to a point on Coos Bay, and there take a boat and are transferred by boat on Coos Bay to Marshfield. There are some ranches along the Umpqua River between Elkton and Scottsburg and from Scottsburg to Gardiner located along the river bottoms. These ranches seem to be general farming and dairying, and they raise some grain along there. He does not think there is any valley from Scottsburg to Gardiner. He does not remember any. There are places from Elkton to Scottsburg where the valley is about from a quarter to a half mile wide. The Umpqua River follows

a deep gorge from Elkton to Scottsburg and the bluffs on either side of the Umpqua River all the way down through that canyon varies from fifty to one hundred feet and then the mountains are high there. The gorge would probably be fifty to one hundred feet, but there are high rocky slopes above that—high mountains on both sides of the river. The Umpqua River practically cuts a gorge through the Coast Range. He believes that Myrtle Point is outside of the westerly boundary line of the indemnity limits of this grant. Sitkum is the eastern limit of the farm lands along that branch of the Coquille River, and is just on the eastern boundary and in the adjoining section to the Umpqua Forest Reserve shown on "Defendants' Exhibit 259." There is one store at the town of Bridge, a small, little country store, and no other business there except a little farm. He could not state the number of acres of farm land there at Bridge, little farms extending up the river from there, little narrow strips of bottom along it, he could not say how many acres there would be. Bridge is located on the middle fork of the Coquille River about twelve miles from Myrtle Point. It is a mountain stream, and at Bridge it does not narrow into a gorge, it is not navigable and you could nearly jump across it in summer time, in winter time there is quite a lot of water in it and it is a swift stream. He thinks they have driven some logs by there from above. The C. A. Smith people get most of their logs by logging railroads. Formerly they got most of them down there from the mountain streams, they would roll the logs down by the mountain streams, but the

Smith people get most of their logs by railroads. Logging down these streams is practically abandoned. They use donkey engines to haul the logs into the streams, a short distance from the streams and a logger can move a log with a donkey engine and cable without resetting his engine, about a quarter of a mile. If he wanted to move it farther, he would have to reset his engine.

Whereupon on re-cross examination witness testified that Myrtle Point appears to be on the edge of the limits of the grant, by reference to "Defendants' Exhibit 259." Myrtle Point is an agricultural town depending upon agriculture. There is a sawmill there. Local people have a sawmill there, but he does not remember the name of the company. That mill cuts about 40,000 feet in ten hours and he supposes employs fifteen or twenty men. There are other farm houses close by Bridge that probably get their mail there, but right in what is called Bridge he does not remember of more than a couple of residences there. There are probably a couple of houses within a range of a quarter of a mile of Bridge.

Whereupon J. F. NELSON, called as a witness on behalf of defendants, being duly sworn, testified, that he is sixty-two years old, resides at Mulino, Clackamas County, Oregon, and is at present a farmer, and he has resided in that county about thirty-six years and occupied the position of county assessor from 1902 to 1909, and while such resided at Oregon City. His present business is farming. He is very well acquainted with the unsold lands of the Oregon and California Railroad

Company in Clackamas County, where they are, and is acquainted with the even sections within the limits of the grant and became acquainted with them before he was elected assessor. He was deputy in the assessor's office at that time, and went around over the county, and over parts of this land belonging to the company, as deputy assessor. He was deputy assessor three years, under John C. Bradley two years; under Bradley from 1894 to 1898 and Williams from 1898 to 1902. He did not assess these lands while he was deputy assessor but passed over them as deputy. During the seven years that he was assessor he assessed these lands, he was over them while he was deputy, but not while he was assessor. He has not been over and through them since that time, frequently, but he has been over them several times; they used to go in there hunting and fishing. He passed through them twice while he was deputy assessor. These lands are situated in the southern and eastern part of Clackamas County, and most of them in the southern part of the county. These lands are nearly all in the Cascade range. The majority of the land is timbered land, or land that is worthless. The majority of it is up in the Cascade Mountains. To which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be considered as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon, and public land entries thereof. Whereupon witness testified that the value of these lands would be

mostly for the timber on them. Most of this timber is fir and spruce, he thinks. There is very little of this land down in the valley where it could be put into agriculture, there is but very little of that, most of the land is up in the mountains where it would be beyond the settlements. In his judgment there is not over four per cent of the lands of the company in that county that would be good for agricultural purposes. Some of the land in the foot hills which is not clear back on top of the mountains, would be good for a short time in the summer for grazing, which he would judge was about twenty per cent of the whole. There is only a short time in the summer that it can be used for grazing purposes, because they would have to wait until the snow goes off. It is up near the snow line and they have to wait until the snow gets off the ground and the stuff grows. It is mostly pea-vine, wild stuff like that. He supposes horses, cattle or other stock might perhaps graze on that land for three months in the summer after the snow was gone and the stuff grew, which takes some little time.

"Q. Now, suppose a so-called actual settler or purchaser should want to buy 160 acres of land in this grazing section, to make it a home, and was required to confine his stock on this 160 acres for grazing purposes, and was not permitted to have a range outside, what would you say as to his ability to support his stock on this 160 acres? Limiting it to that 160 acres only?

A. Why, he couldn't do it. He couldn't keep his stock on it. He couldn't have feed for them.

Q. Why? Why do you say that?

A. Why, because he couldn't get the feed off that 160 acres to feed from the time the pasture gave out until it came in again the next year.

Q. How many stock would 160 acres of this land, any 160 acres of this land, really support for two or three months in the summer, if they were limited to that 160 acres?

A. There couldn't but a very few head. You see, this pea-vine doesn't grow all over. It just grows in spots."

Whereupon witness testified, that a good deal of the grant is of a rocky nature, and there is loose rock on it. It has been burned over, a good deal of it. Most of the other vegetation is this tall fern that nothing will eat. He does not know that there is any other particular vegetation. Once in a great while one will find a spot where there happens to be a little other grass. There is a good deal of salal on that ground up there. He never saw any animal eat the salal. He does not think they would eat it. Possibly goats might, as they will eat most anything. That land that has been burned over in Clackamas County might be used for grazing purposes, if there is anything on it. He would judge that about thirty-five per cent of it could be so used. The burned area is in the southern part of the grant, in Townships 6 and 7 South, Ranges 2 and 3 East, in the south part of the county. Butte Creek is the line between Marion and Clackamas counties. The line between Clackamas

and Multnomah Counties is in Township 2 South, he thinks. The line between Multnomah and Clackamas Counties runs practically east to the top of the Cascade Mountains. Most of the company's lands would be in what is called the southeast part of the county. The Forest Reserve which is at Bull Run, is close to Bull Run; part of Bull Run is in the Forest Reserve. The Cascade Forest Reserve is east of that. He has been at Wilhoit Springs, and Gowley Creek and Butte Creek. He has not been out to the head waters of Clackamas River, which heads in the Forest Reserve. He has been on Clear Creek, Canyon Creek and Cazadera, all through that country; and has been to Cherryville and Eagle Creek, all along there, and has lived in Clackamas County thirty-five years. He considers that the railroad land that has timber on it, would not be good for anything, after this timber is removed; that is for a settler or a person to buy, or for a person to go on. He would not consider that it would be worth anything, because it is so far back in the mountains that they couldn't raise anything on it to make a living on it and for the reason that it is so far back in the mountains, the soil, he does not consider it good to raise anything on, and it is so far back in the mountains, they have frost away late in the spring and early in the fall. Climatic conditions on account of frosts and elevation would interfere with the production of crops. The soil is what he calls "shot land," meaning soil that won't pulverize up like the lands do down in the valley. It works up in little bits of round lumps and dries up. Down in the foothills they raise

some garden stuff and some grain, but no one has any land up in that part, back where the railroad land is. He does not think there is any grain or fruit, to any extent, could be raised on these unsold lands if the timber was taken off. He knows this side, where they have tried to raise grain and fruit, and they raise very little. He knows by experience what it will cost to cut down and clear this land of the stumps of fir timber, because he had land cleared up, and it will cost from $75 to $100 an acre, depending upon how heavy and big the timber is. The land that he grubbed and cleared was fir and some little pine. It was just medium as far as the timber is concerned, neither heavy or light. He bought powder and had the stumps blown out.

"Q. Suppose that the land was timbered, and would carry six million feet of saw timber, board measure, to the quarter section, what would you say as to about what that would cost to get the roots out—take the timber off and get it ready so you could plow it?

A. Well, six million feet is just medium, a medium amount of timber on a quarter section. I would judge it would cost $75 an acre.

Q. Well, now, after you had cleared this land, what would the bulk of it be good for, if anything?

A. Well, I don't know where the timber is whether it would be good for anything or not. I don't think that it would raise anything worth while, that is, to pay for farming.

Q. Why?

A. Because it won't grow.

Q. Well, why won't it grow?

A. Because the soil is not fit for agricultural purposes, and, as I said before, it is too near the snow line.

Whereupon witness testified that there is a good deal of these unsold lands, after the timber is removed, that is rocky, a great deal of it; more than one-half that is up in the mountains is rocky. That is all cut up with canyons up there; wherever these creeks come, there are canyons, and deep canyons, and this timber grows right in the sides of the canyons; and there is hardly any level land, to amount to anything between the canyons. These little creeks that one sees here make deep canyons up there, and the Molalla and Clackamas and all those creeks are very deep canyons. There are no valleys to amount to anything along these creek canyons up there in the mountains where one could farm any. Clackamas County has been settled in the western part of the county, around Oregon City and Milwaukie since about 1840. Oregon City is the oldest town in the Willamette Valley; and it was the first seat of government for the Territory of Oregon, where Dr. John McLoughlin lived and died. Dr. McLoughlin was in the employ of the Hudson Bay Company first, and afterwards when he settled and took up his claim at Oregon City, he never got title, because he was not an American citizen. Oregon City is about thirteen miles from Portland. Mt. Hood is in the eastern part of Clackamas County, Ore-

gon, and a little southeast of Oregon City, about fifty miles, in the Cascade Mountains. Whereupon on cross examination witness testified that he had lived in Clackamas County thirty-five years and had been in Oregon forty-two years. He has lived two miles on the other side of Mulino, on the Molalla River, which is his post office, except six years of that time when he lived in Oregon City while he was assessor. While he was deputy assessor he went through these lands to assess the residents of owned property there. The deputy assessor doesn't assess the railroad land. The assessor himself does that in the office. He went around assessing the people who resided in the county and went over these lands in going to their residences. In visiting the settlers he passed over the railroad lands, and that is his acquaintance with them. The town of Mulino, near which he lives, is some distance from most of these railroad lands; about twelve miles away from most of it. There is a little railroad land within five or six miles of Mulino, and some right close to where he is. Small pieces, but most of the lands of the railroad company are about twelve miles away from his place. He has been over these lands at other times than as deputy assessor; he has been up there fishing and hunting, and all over the mountains. That is a great resort up in there for fishing and hunting, and when they hunt they go all over it. Township 3 South, 1 East, is six or seven miles from Oregon City, and Oregon City is thirteen miles from Portland, making nineteen miles from this land to Portland. The unsold lands in Township 3 South, 4 East is

near Cazadero. He has been all over there. There are settlers all through that country there. Township 3 South, 4 East is settled; 4 South, 3 East is settled and part of 4 South, 4 East is settled. He cannot give the sections now in 4 South, 4 East that are settled and that are not settled; but most of 4 South, 4 East, one is getting up pretty well towards the foothills of the Cascades and there is a portion of that, that is settled and a portion that is unsettled. Here and there are creeks in through there, and the best lands are all taken. All that is left in there now is something that is rough, and is not really worth taking up, because it is on the sides of canyons. 4 South, 5 East and 4 South, 4 East is the same. Dodge and Elwood are up in the foothills of the Cascades. Elwood is south of Sandy. He did not go up to Elwood from Sandy, but went in the other way. He has been all through there. These lands are very rough, cut up with creeks and canyons, and everything—all of this. A good many of these claims—part of them—are on the side hills and are worth nothing but as grazing lands. There are a good many of these settlements in through this section. They get a good piece of land in 160, and the balance of it is grazing land on the side of the canyon. These creeks make big canyons. 5 South, 2 East is a good township, that is all settled, that is good farming country in there. There is very little unsold railroad lands in that township. The company has a little piece of railroad land right here on the Molalla River, probably 30 or 40 acres in there. Section 13 is in the north end of that township, along the Molalla River, and when

one gets up there and a little back, the Molalla commences. All of the lands that are on that Molalla—there is some good farming lands on the Molalla—after one gets up a little further there is a little valley. There are good farming lands in the eastern part of this township, in 5 South, 2 East. He is acquainted with the railroad land in Section 25, Township 5 South, Range 2 East, the Southeast quarter of Section 25 is back in the foothills of the Cascades, and he could not say that he was acquainted with that specific tract. 5 South, 3 East is a settled township; not all of it, he does not mean that it is all settled; it is partly settled, there are settlers in that township. Township 5 South, 4 East is getting up into the foothills of the Cascades, there are settlers in there, it is partially settled. It is not a fact that there are settlers in all of these townships. After one goes south from 6 South, there are but few settlers. There are some settlers in 6 South, 2 East and 6 South, 3 East. He does not think there are any settlers in 7 South, after one passes 7 South, 2, 3 or 4 East. That is getting up into the Cascade Range and he does not think there are any settlers there. He would not say positively whether there were or not, but he does not think there are. He had a plat of every piece of land in the county when he was assessor for his own use, and he knew all about the land. There are some settlers in 7 South, 2 East, the other side of Soda Springs. There are no settlers in the township where Table Rock is situated. There are some settlers in Township 6 South, 4 East. Township 5 South, 5 East, is up in the foothills. It is possible there might

be some settlers in there. He cannot say exactly that there are no settlers at all. 5 South, 4 East is getting into the Cascade Mountains. 4 South, 5 East, is in the Cascade Mountains, east of Cazadero and Estacada. There are settlers in that township and a few, but not many, in Township 3 South, 6 East, which is way up in the Cascade Mountains. There are not many settlers there, he thinks. He is perfectly satisfied that there are not many settlers there, but he would not swear there wasn't. He would not be positive, but he is convinced there are some settlers in Township 6 South, 4 East. Township 6 South, 5 East, part of it is in the Cascade Reserve and part of it is settled. In Township 2 South, 6 East, Marmot is settled, and at Cherryville there are some settlers, but not many. That is in what they call the burn. Dodge is up in what they call the German burn. That has all been burned over years and years ago. There must be settlers in 3 South, 6 East. There are several townships where there are no settlers. This county runs to 8½ South, he thinks it is, and 9½ East.

"Q. Now, please examine the map, Mr. Nelson, and tell me what townships have no settlers in them, to your knowledge?

A. Well, we will say 7 South, no—none—I wouldn't say there was none in 7 South 2 East. 7 South, 2 East, you see. Here is the county line—3 South and 7 East.

Q. That is 7 South, 3 East you are pointing to.

A. What was it you asked?

Q. I asked you just to name the townships there were no settlers in?

A. 7 South, 3 East, there are very few. I cannot answer those questions positively from my memory.

Q. You wouldn't testify positively, then, that there are no settlers in any of these townships?

A. Well, I would testify that there was no settlers in it, to the best of my knowledge; but I could tell by going to the assessment roll, I think, because we assessed. I have got maps of Clackamas County, or did have, that showed every tract of land and who owns it at the present time every year, and if I could examine them I could tell exactly what townships and everything was settled, and what was not.

Q. But from your present knowledge, you would not attempt to testify positively as to what townships had settlers and what had not?

A. No, sir, I wouldn't do that, because I don't want to testify to anything but what I know."

Whereupon witness testified that the locations of these lands in the different sections odd or even, makes a good deal of difference in the formation of the soil and in the lands; for instance, Section 3, 6 South, 5 East, might be a good section, and some other might be in a canyon or worthless. The numbering of the sections would make no difference. In the southern part of the county, covered by his testimony, there is probably no difference between the railroad lands and the even num-

bered sections. Most of the northern part, covered by his testimony, was taken up before the land grant was given to the railroad. His testimony is in regard to the railroad land, because the good land has been either taken up or bought up until one gets back into the Cascade Mountains. There is some of the land that is worthless, that they wouldn't have, even down here in 5 South, 2 or 3 East, some that is worthless, they wouldn't have it. The general character of the land is the same, whether on the even numbered or odd numbered sections, and his testimony would have to cover the condition of the country as it exists there.

"Q. You never examined this—ran the lines on this land—to see if 160-acre tracts could be selected by 40-acre subdivisions, that would furnish support for a man and his family in cultivation and use of the land?

A. No, I never ran the lines, but a majority of the land is up in the mountains, so far back that it would not support a man and his family. There is parties that have land up in this side of the railroad land that cannot make a living on their land, because produce or grain, or anything of that kind won't grow. It has been burned over, and it is poor land. Is poor land, that is, all stuff won't grow on it. Once in a while you will find a piece of land there that you can grow some fruit on, or you can grow a little vegetables.

Q. Isn't it a fact that this shot land you have mentioned is generally considered good fruit growing soil?

A. In a fruit location; but when it is too far back,

it isn't worth anything.

Q. If the altitude there is not very high, is it, Mr. Nelson?

A. I don't know just what the altitude is, but it is getting pretty well up when you get up to 6 and 7 South, that is, when you get up to 6 South, 2 East, there is a valley Wilhoit Springs is in. When you get past that, you get right up in the foothills of the Cascades. I don't know what the altitude is. I know parties that have gone on Government land in 6 South, 2 East, and tried to make a living there, and gave up, moved out, because they couldn't raise grain or vegetables to live on.

Q. You were so informed? That is from hearsay, I understand?

A. I saw it, and have been there.

Q. You didn't know anything about their uses of the land, did you? You didn't know how they cultivated the land?

A. I did.

Q. Except what you were told?

A. I knew the parties well, and knew them for years.

Q. So you would say that none of this land is susceptible to cultivation in the grant?

A. No, I don't say that at all. I don't say there is none of it at all, because there is some of it in the grant that is good land—some of it.

Q. I mean in Clackamas County, that you have testified to?

A. Yes, that is what I mean. There is some good land in this grant in Clackamas County that is susceptible to cultivation.

Q. Where is that land located, Mr. Nelson?

A. It is 4 South, 2 East, that you was looking at here—a very little. There is not much land that is good for cultivation; but this in 4 South, 2 East, is what we would call in the valley, and that could be cultivated. In Section 11, 4 South, 2 East, they have got some land there that, after the timber is removed, if a person would clean it up, it would be farm land; they could farm it. But it would cost them $100 an acre to clear it up—more than the land is worth.

Q. Your experience in farming has been principally in the valley land, hasn't it?

A. I have been around. My farming, personally, has been in the valley land, but I have lived up in the mountains, and seen where they farmed there on this burned-over land, like the railroad company has. Persons will try it for a while, and then they will give it up. They cannot make a living on it, and move out. I know of several that has done that."

Whereupon, witness further testified that there is considerable of this railroad land that is not burned over. If it had been burned over there would be no timber on it. Second growth is not considered when one is talking

about timbered lands. Of course, there is second growth of timber; but when he speaks of timber lands, he don't mean second growth. Some of the timber in those foothills is good timber. To make it accessible to market they would have to build a logging road and railroad in there. There are no streams one could run the logs down. They would have to put a railroad in there. These timber lands are about fifty miles from Portland. There are some of the railroad lands in 4 South, 3 East, that are susceptible to cultivation. Possibly there might be some railroad land there, a little in there, in Township 4 South, 3 East, that would be tillable. The railroad land, when they assessed it, if it was not timbered land, and could be cultivated, was put down in that way on the assessment roll, so that he would know what kind of land it was, but he could not remember the sections of Clackamas County; there was over one million acres in the county, and it is utterly impossible for him to remember each section, just how it lays. He has a way of knowing the percentage of these lands that are susceptible to cultivation, or suitable for agriculture, and figured it out from the assessment rolls and his own personal knowledge. He has been over a great share of the land himself. A good deal of the land in Township 5 South, Range 3 East, is settled and possibly there might be some tillable land in the railroad company's land. He could not tell about Section 7. He does not remember the sections in each township, just how they are. Township 5 South, 3 East, is out about Canyon Creek. Some of the specific tracts he could testify to, from his

personal knowledge, because he knew the sections and knew the land, where it is; but as a general thing, he wouldn't do it. That is only in the southern parts of the county. He knows that land is worthless. He can testify to a good deal of that land in the southern part of the county as worthless. He can testify that the unsold lands in that vicinity generally, because all of the unsold lands are unfit for cultivation. A person couldn't make a living on it; if it were cleared up a person couldn't make a living on it. He does not mean that his testimony shall go to all the lands in Clackamas County to that effect, just the lands in the Cascade Mountains, that are so far back they are not worth cultivating—a person couldn't make a living on them. Of course, they have good land in Clackamas County, a little of it, but not much; private individuals own most of it. There are settlements running up into these townships, within which these lands are situated and until one gets too far south. In 6 South, 2 East, there are some little settlements, and in 7 South, 3 East, a very little. Butte Creek cuts across through there and cuts off some of those two townships, and puts it in Marion County. There is a good deal of livestock raised in Clackamas County. There isn't near enough stock raised in that county to supply the markets. There is a good deal of stock in the county—there is a good deal of stock bought outside of Clackamas County for the markets here, and after one gets back in the foothills there isn't so very much stock raised. Mots of the sheep and cows from Eastern Oregon range on the Forest Reserve. He does

not think the unsold lands in Clackamas County would make a good sheep range, people never take any sheep up there. There is a good deal of land in Eastern Clackamas County that is not in private ownership, there is quite a lot in Eastern Clackamas County outside of the Forest Reserve, he could not tell how much there is. There is considerable fruit raised in Clackamas County, but he does not think considerable fruit is raised in the vicinity of these railroad lands; or very much in the eastern or western edge of the lands in the grant. As a general thing farmers have a little orchard for their own use, and that is about all the fruit there is raised around there. He has heard of the Hood River fruit country, at Hood River, Oregon, on the slope of Mt. Hood, part of the Cascade Mountains, but does not know whether it is generally recognized as one of the finest fruit countries in the United States. He thinks they haven't tried it. People who want to sell lands will say that it is good for a good many things that it is not good for. He does not know whether the Hood River fruit country is producing good fruit now or not. He would like to say in explanation a little more about the Hood River country. When asked the question he didn't understand about the Hood River fruit country. He was thinking of Mt. Hood. The Hood River fruit country is, of course, a good ways from Portland, on this side of the Columbia, across the Cascades. He knows all about that country. Mt. Hood is situated in Township 2 South, Range 9 or 9½ East, in the eastern end of Clackamas County. Clackamas County runs to

the top of the mountains. He has been up to the Hood River fruit country and knows that it lays in the Cascades. He does not know how far from Mt. Hood the fruit country is, he could not say in regard to that. Mt. Hood is in 2 South, 9 East, right on the edge of Clackamas County; 9 East is 18 miles east; 2, 3, 4, 5, 6 and 7 South, Ranges 2, 3, 4, 5 and 6 East, wherein the railroad lands are located; Mt. Hood would be 18 miles east of these railroad lands. He does not know the distance from Mt. Hood to the Hood River lands. The Hood River lands are altogether in different shape from the lands on this side of the Cascades. Hood River is down on the Columbia, and naturally would be good fruit land, the company's land is up on top of the Cascade Mountains, where he don't think it would be a fruit country at all. He couldn't say from having seen Mt. Hood, which is visible from the fruit lands in the Hood River Valley, and the lands of this grant in Clackamas County, what, if any, difference there is in the distance from Mt. Hood to the Hood River fruit country. He really hasn't any opinion, because he does not know anything about it, and cannot tell. He has been to Hood River several times, but never paid any attention to the distance between Hood River and Mt. Hood. He knows that the Hood River fruit lands are in the foothills of the Cascades. These lands of the railroad company are about on top of the Cascades, and the Hood River lands are down in the valley, on low ground next to the Columbia River, and that makes a great deal of difference. It is a fact that the Cascade Mountains, the foot-

hills commence at the Columbia River, at the town of Hood River, and gradually go up to the top of the mountain. There isn't much of a foothill to these fruit lands. It isn't very far from the Columbia River up to the fruit lands in Hood River; they are not much higher than the Columbia River. Some of these fruit lands are practically all on hillsides, on rolling land, and some of them are right on top of the flat; table lands, gradually rising—flat lands up from the river. There is no river flat, but the Columbia would naturally be the level. He does not know how far these fruit lands extend back. He was up on the first bench and went over it. He never saw any fruit growing along on the flats of the Columbia River. He was not up there. He does not know as to whether the flats along the Columbia River would overflow at this place. He does not think the Columbia could get high enough to overflow them. It is rather steep from the Columbia River up at Hood River and along there. It is not straight up. They have a wagon road up there. It is a steep hill. He never paid any attention to how that land lies towards Mt. Hood, but it naturally gradually ascends to Mt. Hood; it would have to do so. He could not tell if that is a broken country, as he never was outside of the town of Hood River, up on the top of it. It is a broken country when one gets up in there. It might be broken at the river, and still when one got up on the first bench, there might be a little stretch of level land there. He never tried to raise any fruit or vegetables, or any grains, or agricultural products of any kind, in the vi-

cinity of or on any of these railroad lands, but he is well acquainted with persons who have, and has been at their places. These persons tried to raise fruit there. He does not suppose they were experienced fruit people. The names of these persons were Mr. Paynter, Mr. Russell and Mr. Davis. Russell lived there and Davis lived there, about fifteen or twenty years, perhaps twenty-five years, and were old settlers in that country. They had to go into the cedar timber and make shingles to make a living. They couldn't make it off their land. He knows that because he was clerking in a store, and received the shingles from them, and knew all about it. He has been all over their lands and knows all about it. He knew all about their financial condition, from having clerked in a store where they bought groceries, and being up on their farms. He has been up on their farms while he was in the store and after he was out of the store, when he moved into Clackamas County. They lived up there fifteen or twenty-five years. When the timber and deer ran out, so they couldn't make shingles and get their groceries, they moved out. They have all left there. He thinks they have been out of these perhaps fifteen years or more. He cannot give the section where they lived, but they lived in 6 South, 2 East. He does not know the section they lived on. He thinks they both lived in the same township and range, they were quite close together. They lived there in 1876, and he does not know just when they left. He came down here in Clackamas County. He knows they have been gone—Davis has been dead a good many years, but his family

left there. Russell is living now, and he left there quite a good many years ago. He has been on Russell's farm. Russell tried to raise grain, hay and oats for his cattle, and the oats would grow about a foot and a half or two feet high, where they did grow, and the fern would grow a great deal higher. He never got the ferns out of the ground. Davis died down on his son's farm in the valley. This fern land is not generally recognized as good vegetable land, even when it is cleared. Some of it is, but fern will grow very large where one cannot grow anything of vegetables, or fruit, or grain, to amount to anything at all. One generally finds ferns in rich, loamy soil most all over Oregon. One will find ferns where the land is not all rocks, but where it is rocky gravel, fern will grow most any place. It will go down to moisture fifteen or twenty feet, the roots will. He does not know that a number of the best fruit farms in the State of Oregon are on fern lands.

Whereupon J. T. GRAY, called as a witness on behalf of defendants, being duly sworn, testified that he is forty-five years old, by occupation a farmer, and has lived in Township 12 South, Range 6 West, in Benton County, Oregon, where he has lived for fourteen years, about fourteen miles or thereabouts from Corvallis. He has been over about half of the unsold lands of the Oregon and California Railroad Company in Benton County. He first hunted over them, and this summer he was out a month and a half as a fire patrol. He traveled them as a fire patrol for the Oregon and California Railroad Company, to protect their timber and

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other timber as well, from fire. Part of these lands are covered with fir timber, and part are burned. To which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be deemed as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified that about three-quarters of the lands that he had traveled over was timbered and its chief value was its timber. Some of the lands he had visited were burned over; he could not state the number of acres, but would say there is a good scope of country, probably ten sections, which had been burned over. The character of some of this soil is gravelly, and other is more of a clay soil, while some of it is loose soil, with fern in it. Most of the vegetation grown on this land is fern and salal and some portions of it has grown up to brush. He would say that of the entire holdings of the company, both timbered and burned over, that he has visited, there would be not over fifteen per cent suitable for agriculture or horticulture, or any useful purpose, other than the timber that is on it. He would hardly know what use to put these burned over lands to, but these few settlers who have settled between the railroad land back of the peak, have tried to run a few goats, with out-ranges, but he does not know as to their success. There is very little grazing on these burned over lands; the vegetation is fern with a few patches of peas early in the spring. What pea vines there are, are only in

small patches. These pea vines only afford sustenance for animals two or three months.

"Q. Now, suppose, Mr Gray, that an actual settler, under this law which the Government is seeking to assert against the company, should apply to the company and be allowed to purchase 160 acres at $2.50 an acre for a home for himself, I wish you would state to the court what this man would do, or could do, if anything, with this 160 acres, if he was required to confine himself to that land, and did not have the privilege of pasturing outside land, or doing work outside.

A. Well, there is very little of it that can be got to with a wagon road without a big expense, and it is generally rough, and I don't think a man could live on it the year around—he would have to move out in the winter time.

Q. What do you say, and what can you say, and what is the fact, as to whether or not such a man, under those circumstances, on 160 acres, could or could not make a living at any useful business on the land?

A. Not at present, unless something would turn up that we haven't got in our community there."

Whereupon witness testified that a majority of these timber lands is fairly good timber. He has had experience as a logger, and knows the fir timber that is capable of being manufactured into saw timber or lumber. He has had experience as a logger nine years for the Benton Lumber Company in Benton County. About twenty per cent of these lands he has been over in Ben-

ton County would make first grade lumber. Most of the timber would come under the head of second class timber; a small portion would be first, and a small portion would be third class. He has been over the balance of these lands in Benton County, or near them, or across them, to some extent, other than those that he has spoken of, but not enough to give evidence before the court here of what the character of the balance is. He noticed the general character of the balance, just from looking at it, and it is broken land, and it was just about the same as what he had been over, from looking at it as he went along. There are other burned districts in this unsold land, besides the 6,400 acres of burned area that he had mentioned, that he had not been over, but it is the same kind. Its value is less, because it is further back in the mountains, where nothing but a pack horse could be gotten to the land. Mary's Peak is 4,600 and some feet high, and has good timber around it. He doesn't know the height of the others. Grass Mountain is a little lower. Mary's Peak is a snow peak and carries snow until July. He doesn't know the exact distance, but it is southwest from Corvallis and must be sixteen or eighteen miles. Mary's River rises on Mary's Peak and flows in a northeast direction, but not direct, and empties into the Willamette at Corvallis.

"Q. Where are these lands now, chiefly, with reference to Mary's Peak?

A. The timber land is around Mary's Peak, east of it, and further southeast, across the little valleys

there that is between."

Whereupon, on cross examination, witness testified that he has been in the employ of the Oregon and California Railroad Company about a month and a half this summer, and is the only time he ever worked for the company, and is not employed by them now, but was up until it rained and made the fire safe, about a week ago; something like that, since he has been out for the company, a week or ten days ago. It has been raining somewhat all summer, but they have had one or two seasons that they were required to look after the fire. He couldn't tell the exact number of acres that he patrolled. The tract he patrolled follows the ridge about sixteen miles long, varying in width on account of being burned off, and perhaps six miles wide on an average. He could give a part of the location of these lands by looking on a map. He lives in 12-6 West and there is some timber there. In 12-7 West there is also timber, and he patrolled these townships; and he had a view of it that way. A little valley runs through, known as the Alsea Valley and Wells Creek. There was a wagon road there, and he drove that way. He has lived in 12-6 West ten years the 8th of November, 1912, and prior to that time he lived about two miles southwest of Corvallis. He now lives on Section 32, which was a homestead that he had purchased. There are settlers in that township besides himself, several of them. There is a little valley, which is just settled, the valley part. Not all the settlers in that township are located in that valley, some are across the divide from him, out of the timber

entirely. He never ran the lines of the sections that he patrolled, but just passed along the hills; he has been on both sides. There are settlers on the even numbered sections in the valley, and there were a few settlers on the lands of the company behind Mary's Peak; but on the ridges there are no settlers except in the valley. They are on both odd and even sections in the valley. They were taken by donation claims or sold to them. There is a town of Alsea in one of these townships, a postoffice, and there are settlers in that vicinity. The township line runs through Alsea. The north part of Alsea is divided. It is in 14-8 West. The dividing line is right in the north part of Alsea, splits the town. He has only a very general knowledge of the remainder of this grant, from having observed it at a distance, except that he has been almost all over what he has testified to, on both sides of those ridges, broken country, that has this timber on. He patrolled that country. When it was raining he made some trails on these sides, so that the land could be got to in case of fire when it was needed with a pack horse. The soil is not very good, in general, in the townships where the railroad lands are situated, it is too broken and steep, and only a small portion of the soil is good. There are parts—small parts of it—that are good, but they are small. There are no other grasses besides pea vines the season round that would furnish range for goats, sheep or cattle. There are places in the foothills where they have a little bottom land and a lot of side hill, and they range this rough country in that way. Where one has enough valley land to raise

feed for the winter, they can keep stock and range on these hills in the summer, and drive them down in the winter and take care of them.

"Q. Isn't it a fact there are a number of 160 acre tracts that a man could take up in these railroad lands, that is, not by legal subdivisions, but in 160-acre tracts, 40-acre subdivisions, that a poor man could take up, a man that was up against it financially, and make a living there for himself and his family?

A. No, sir; none at all. That question is like this—a man would have to have money to live on, and be able to go out and buy, before he would be able to go up there and live a number of years to clear this up and live at all, even if the soil was good.

Q. There is some agricultural land in there, isn't there, in its present state?

A. Down in this valley is very fine land, but it is narrow.

Q. There is some of that land is railroad land, isn't it?

A. That is the valley?

Q. Yes.

A. Not to my knowledge. There might be a small piece somewheres that I don't know of; but none, literally speaking."

Whereupon witness testified that he lives in Section 32, Township 12 South, Range 6 West. There is no

railroad land adjoining him. There is not a great deal of railroad land in that township. There is some of this Coos Bay wagon road grant land there, he thinks it must be, because Section 5, right close to where he lives, belongs to that grant. Whereupon on redirect examination witness testified that he goes to these lands for patrolling, by a road running right down through the center of the district, called the Alsea road. Alsea is a valley over on the coast. It reaches tide-water further down. Alsea has been settled thirty or forty years. He has been in the Alsea Valley. He is not prepared to tell what kind of land is on the coast in the Alsea Valley; but around the town of Alsea there is nice, good land. Alsea has three or four hundred population. The Alsea River heads right west of Mary's Peak, and the other branch heads around back of Bellfountain, by a little mountain they call Green Peak. Bellfountain is a post-office, has a store or two, and is out across on the Willamette Valley side. There are some settlements on the Alsea River, which leads over into the Alsea Valley, along the river. This valley is a narrow valley. Down to Alsea it is fairly well timbered, both sides of this little stream. He got into these lands of the company to patrol them by cutting a trail for his saddle horse; one could not drive an automobile or team through them very well. Whereupon, on recross examination, witness testified that Alsea is about thirty miles from the coast, he would say a little further than that. Alsea Valley leads to the coast, but the town is not on the coast. Alsea is about the center between Corvallis and the coast. Cor-

vallis is a city of some size and the Oregon Agricultural College is located there. There is quite a lot of good fruit country in Benton County; they are setting out large orchards. Corvallis is outside of the timber belt and it is about fourteen miles by wagon road before one strikes much timber; and it is about the same distance to the railroad lands which he was patrolling; that is, about that distance of fourteen or fifteen miles to the nearest foot of it. Corvallis is situated in the Willamette Valley and is surrounded by a fine agricultural country. He is not prepared to say whether there was or was not some railroad lands in the townships in which Corvallis is located, or in the adjoining townships.

Whereupon W. V. FULLER, called as a witness on behalf of defendants, being duly sworn, testified that he resides at Dallas, Oregon; is at present a merchant; has lived in Polk County eleven and a half years, and has been in the timber business in Polk County about eight years, and has handled and cruised timber lands and has had experience in cruising timber lands in Polk County. He does not know anything about the lands in Polk County east of Range 6 West. These lands, whatever there are, are just a very small fraction and are not timbered, not much, if any, timber on them, but in Ranges 6, 7 and 8 West, he is familiar with all of the unsold lands of the Oregon and California Railroad Company and has been practically on every forty acres of these lands and familiar with them since 1901. The lands lie in the Coast Range of mountains on both sides, on either slope, east and west side and on top of the

mountains, and are mostly very hilly land—he supposes as hilly land as there is in the Coast Range of mountains in Polk County, and the elevation will run from 1000 to 3500 feet, to which testimony complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be deemed taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof.

Whereupon witness testified that most all of the railroad lands in Polk County are well timbered. The main portion of the timber is fir, but in some parts there is a small amount of white pine, larch, hemlock and cedar. There are five or six sections of land, the bulk of which has practically no timber on it. The remainder of these lands would run from 40,000 to 75,000 feet per acre. This would be considered a good stand of timber. The value of these lands lies almost wholly in their timber. There is very little of the total area of these unsold lands that would, in his judgment, be agricultural or suited to agricultural or horticultural purposes. If one wanted to go into it by sections, he could get at it easier. He thinks there is not ten per cent of it that could be used for agricultural or horticultural purposes, for the reason, in the main, that the elevation is too great there for farm products or fruit to grow successfully. There is a great difference in the soil. In the main, if the lands of the company in Polk County were on an elevation suitable for raising crops, etc., he thinks they would

raise crops. Some of them, however, are very rocky. Probably thirty per cent of this land could be utilized for grazing purposes. These lands that could be used for grazing purposes lie on a less elevation, say, than 1000 feet, and on this there is a good deal of pea vine and other small growth of vegetation that stock eat. Sometimes the pea vine grows at a higher elevation than that, but not a great deal. He thinks there is thirty per cent, or such a matter, of the entire area of these lands that could be cleared of timber, burned over, seeded to grass, and devoted to grazing purposes. It would cost from $75 to $100 an acre to clear this land of the timber so they could be suitable for agricultural purposes. He has known a good many people who have undertaken to make a living up in those hills, cleared little patches of land at different times, and he knows that at this time one cannot find any of them living there. They did not seem to be able to make a living. Practically all of the entries in the even sections within the limits of these railroad lands have been sold, a good portion of them have been sold. Some are still in the hands of the original entrymen, who hold them yet. The reason he knows to whom this land has been sold is that he has a great many times made out maps of all the lands in Polk County, and he was occupied that way last week several days making out a map for the Spaulding Logging Company. Therefore, he knows practically every forty acres of land in Polk County. The land is owned in the main—the land is owned by the Spaulding Logging Company, and Mitchell & McClure, the land in the name

of Mitchell, Trustee, the Willamette Valley Lumber Company—he has forgotten the parties who bought the Mitchel tract there—five large holders. This land in the even sections was mainly entered under the Timber and Stone act. The homestead entries are exactly in the same condition as the stone and timber entries. The timber companies, when buying in there, did not pay any more or less for a homestead entry than a stone and timber entry, excepting where the settler had possibly cut off ten or fifteen acres of timber to make a home, they would deduct that from the land, because the timber value was not there on those acres, that had been removed. These lands were bought for the timber and that was their chief value then and now. The homestead cabins and other improvements of the homestead entrymen are there yet, excepting in some few instances where they have been burned or rotted down; they are not occupied. Under the timber and stone act no settlement is required. The character of settlers or entrymen was that of any one who happened in the country there; some had families and some had not. In the main, these settlers commuted on their homesteads at the end of fourteen months. They generally complied with the law as to residence during the first fourteen months as near as they could, before they proved up; some of them resided continuously on their lands, and some did not.

Q. Suppose that a man would apply to the company under this act of April 10, 1869, to settle on 160 acres of this land and pay the company the price of

$2.50 an acre, and desire to make it his home and make settlement on it, what, from your knowledge of these lands, would be his ability to do that and make a living?

A. They could not make a living off the land alone. He would have to have some other way of supporting his family.

Q. Well, now, why couldn't he take 160 acres that way and make a home for himself and family, and make a living?

A. One reason is because the land is so heavily timbered, unless he had some outside money to clear the land, it would be an impossibility. Another reason is, as before stated, the altitude is such that crops will not grow successfully, that a man can get his seed back, you might say.

Whereupon, on cross examination, witness testified:

Q. Do you remember of having a conversation with E. S. Foley, a special agent of the General Land Office, at your drug store in Dallas, on or about the 9th day of March, 1912?

A. I remember of having a conversation with some one. I don't remember who it was.

Q. Do you remember of executing an affidavit before Mr. Foley at that time?

A. I don't remember of executing any affidavit.

Q. I will ask you to examine this document and state to the court whether that is not an affidavit that you executed before Mr. Foley on the date stated?

A. It seems to be my signature. Do you want me to read it all? Do you want to ask me any questions about it?

Q. Yes. In this statement or affidavit, Mr. Fuller, is it not stated that "He (meaning yourself) is engaged in the drug store business, and where he has lived,"— "W .V. Fuller, being first duly sworn, deposes and says that his residence and postoffice address is Dallas, Oregon, where he is engaged in the drug store business and where he has lived for eleven years. And affiant further says that for seven years he followed mining and land locating in Townships 7, 8 and 9 South, Ranges 6, 7 and 8 West,"—

A. That is cruising, that word there.

Q. That is "cruising" instead of "mining"?

A. Yes.

Q. (Continuing) "and is familiar with said lands and with their character. At this time the greatest value of these lands, generally speaking, is for its timber, although much of it would be valuable if cleared for general farm purposes, including fruit, dairying and grazing purposes. And affiant further says that on June 11, 1907, he made an application to the Oregon and California Railroad Company to purchase the southeast quarter of Section 31, Township 8 South, Range 7 West"— a word I can't make out—"in Polk County, Oregon, which said application was declined, and said railroad company refused to recognize or consider the application

in any way." Signed "W. V. Fuller." And also stating, "Subscribed and sworn to before me at Fuller's drug store in Dallas on this 9th day of March, 1912." Those statements are contained in that affidavit there?

A. Yes, sir.

Whereupon complainant offered said affidavit referred to in this cross examination in evidence, to which defendants objected as not impeaching evidence, as incompetent, irrelevant and immaterial, and as being prepared by the Government, written out by Mr. Foley as a special agent of the General Land Office in his own language, on some conversation which he may have had with the witness, which said exhibit was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence, and identified as such.

Whereupon on redirect examination witness testified that he did not know who Mr. Foley was, and he had forgotten all about the occurrence, but he remembers now that a man did come into his store and talk to him about the land, and he sees that that is his signature to the affidavit. He does not remember—he had forgotten what the document contained.

Q. Did you make the statement to Mr. Foley that "At this time the greatest value of these lands, generally speaking, is for its timber'—you made that statement to him, did you?

A. I presume that I did, yes.

Whereupon witness testified that he presumes, although he could not say, that he also made the statement, "Although much of it would be valuable, if cleared, for general farm purposes, including fruit, dairying and grazing purposes." By the words "much of it" he means there is some of it, quite a bit of it, in fact, that after it was cleared, would be valuable for general farm purposes, including fruit, dairying and grazing purposes. He does not remember that he told him about the climatic conditions that would prevent it being suitable for agricultural and horticultural purposes. He did not talk to him only a little while. Foley did not tell him what he wanted this statement for. He has a record of his cruises referred to in this statement. He made this record in 1907 or 1908, he does not remember which. A good share of it was made by him as the result of his own cruising. He was deputy county assessor and had a contract from the county for cruising all of the timber lands in the county for assessment purposes, and he made that cruise for that purpose, and this is a copy of that record made by him or under his supervision. He will take Township 7 South, 8 West, that he cruised and read the amount of each forty.

Section 1, northeast quarter of the northeast quarter, 2,900,000 feet; the northwest of the northeast, 2,900,000 feet; the southeast of the northeast, 1,800,000 feet; the southwest of the northeast, 2,200,000 feet; the northeast of the northwest, 2,800,000 feet; the northwest of the northwest, 3,200,000 feet. I will state that those forties largely overrun—there was about 60 acres to a forty, or

nearly that. The southwest of the northwest, 2,400,000 feet; the southeast of the northwest, 2,200,000 feet; the northeast of the southeast, 2,100,000 feet; the northwest of the southeast, 3,300,000 feet; the southeast of the southeast, 2,100,000 feet; the southwest of the southeast, 2,000,000 feet; the northeast of the southwest, 2,100,000 feet; the northwest of the southwest, 3,000,000 feet; the southwest of the southwest, 2,100,000 feet; the southeast of the southwest, 2,200,000 feet. Take section 23 of the same township: The northeast of the northeast, 1,300,000 feet; the northwest of the northeast, 1,200,000 feet; the southwest of the northeast, 1,600,000 feet; the southeast of the northeast, 2,000,000 feet; the northeast of the northwest, 1,500,000 feet; the northwest of the northwest, 1,700,000 feet; the southwest of the northwest, 600,000 feet; the southeast of the northwest, 800,000 feet; the northeast of the southwest, 1,900,000 feet; the northwest of the southwest, 2,000,000 feet; the southwest of the southwest, 2,000,000 feet; the southeast of the southwest, 1,800,000 feet; the northeast of the southeast, 2,400,000 feet; the northwest of the southeast, 1,800,000 feet; the southwest of the southeast, 1,800,000 feet; the southwest of the southeast, 2,200,000 feet.

Q. What township and range is that in?

A. 7 South, 8 West.

Q. Now give another township and range.

A. Take 8 South, 8 West, directly south of that.

Q. 8 South, 8 West?

A. Yes, sir.

Q. All right.

A. The north tier of forties in this township run short, as they have overrun in the township north. In Section 1, the northeast of the northeast, 1,500,000; the northwest of the northeast, 2,700,000; the southwest of the northeast, 1,400,000; the southeast of the northeast, 1,200,000; the northeast of the northwest, 1,600,000; the northwest of the northwest, 1,700,000; the southwest of the northwest, 1,400,000; the southeast of the northwest, 1,700,000; the northeast of the southwest, 2,600,000; the northwest of the southwest, 1,900,000; the southwest of the southwest, 3,600,000; the southeast of the southwest, 2,400,000; the northeast of the southeast, 1,900,000; the northwest of the southeast, 2,000,000; the southwest of the southeast, 1,900,000; the southeast of the southeast, 3,400,000—very heavy timber.

Q. Anything in Section 3, Township 8 South, Range 8 West?

A. Yes, sir. The northeast of the northeast, 700,000 feet; the northwest of the northeast, 800,000; the southwest of the northwest, 1,600,000; the southeast of the northeast, 500,000; the northeast of the northwest, 1,300,000; the northwest of the northwest, 1,400,000; the southwest of the northwest, 1,400,000; the southeast of the northwest, 1,400,000; the northeast of the southwest, 1,500,000; the northwest of the southwest, 1,300,000; the southwest of the southwest, 1,200,000; the southeast of the southwest, 1,800,000.

Q. Do your cruisings that you have there in your record show anything for the even sections in that township and range?

A. It shows exactly the same, yes—everything.

Q. You cruised the even sections, too, did you?

A. Oh, yes, certainly.

Q. Now, take an even section there, and give us the cruising on it in that same township and range, alongside of the railroad section—Township 8 South, Range 8.

A. Take Section 2. That lies between 1 and 3 that I just read. The northeast of the northeast, 1,200,000 feet; the northwest of the northeast, 1,400,000; the southwest of the northeast, 1,800,000; the southeast of the northeast, 1,900,000; the northeast of the northwest, 1,400,000; the northwest of the northwest, 1,400,000; the southwest of the northwest, 1,600,000; the southeast of the northwest, 1,100,000; the northeast of the southwest, 1,700,000; the northwest of the southwest, 800,000; the southwest of the southwest, 800,000; the southeast of the southwest, 1,000,000; the northeast of the southeast, 1,800,000; the northwest of the southeast, 1,700,000; the southwest of the southeast, 1,000,000; the southeast of the southeast, 900,000.

Whereupon witness testified that in making these cruisings he cruised by forties—both the even and odd sections. He cruised all of the timber lands in Polk County, over 200,000 acres, including the lands involved in this suit, all of the timber land that run over a certain

amount, that one would call timber land at all. He cruised Townships 7, 8 and 9 South, 6 West; Townships 7, 8, 9 and 10 South, 7 West, but there was very little of Township 10 South, Range 7 West, in Polk County. He cruised Townships 7, 8 and 9 South, Range 8 West. The purpose of this cruising of which he made this record was to arrive at its value for assessment purposes. He is not positive whether it was for the year 1907 or 1908. The diagram shown in his record is a township of thirty-six sections. In cruising these lands he sought to find out the amount of timber, the quality of timber, the lay of the land, the quality of the soil, its distance from navigable water or railroad, and everything that would tend to show the value of the land, and his testimony in this case is based upon this information thus obtained.

Whereupon on recross examination witness testified that these lands he has described are pretty well to the west side of the grant, excepting 7-8, that is pretty well to the east side of the grant in Polk County. The line of the western limits of the grant is in Range 8, extending a little east of the center of these two townships. These two townships are rather in the extreme northwestern portion of Polk County.

Whereupon R. B. HUNT, called as a witness on behalf of defendants, being duly sworn, testified that he resides at Eugene, Oregon, and is a civil engineer, and has lived in Lane County fourteen years. He is well acquainted with the unsold lands of the Oregon and California Railroad Company in Lane County.

Referring to Defendants' Exhibit 259, witness testified that Lane County is bounded on the east by the summit of the Cascade Range, on the west by the Pacific Ocean, and on the south by the Calapooia Range from its junction with the Cascade Range, following westerly to Range 7 West; thence following north on the section lines to the Siuslaw River; then following down the Siuslaw River to the north line of the last tier of sections, or the north tier of sections of Township 19 South; then following west to the Pacific Ocean, and is bounded on the north by the watershed between the Calapooia River and the McKenzie waters, starting from the junction of that divide of the Cascade Range and following in a westerly direction to Range 2 West; then running by sections down to the last tier of sections north, in Township 16 South; then following west to the Willamette River; then following the center of the Willamette River in a northerly direction to the last tier of sections in Township 15 South; then following west to the Pacific Ocean. He has been on each township, and on each section of some townships of these lands marked in green on Defendants' Exhibit 259. For six years he was deputy county surveyor of Lane County, and was engaged in surveying out lines. For several years he was examining timber for private individuals and for a large timber concern. Most all of the examinations that he was making were of lands adjoining the Oregon and California grant, and in some instances they were not, but in most instances they were land adjoining, in the even sections. In the reports he gave on these blanks

of the timber companies he reported the timber and logging conditions, the topography of the country, the soil, and the agricultural lands, and all that would make a complete report of the land, and he made these reports in the form of what are called in this record "Cruisers' Reports." He is a practical cruiser. In every instance in making the examinations of these even sections adjoining the unsold odd sections, he would be running a line between the two sections, and necessarily would pass around the boundaries, and from his knowledge thus obtained, the chief value of these unsold lands of the company in Lane County would be for their timber. To which testimony complainant objected as incompetent, immaterial and irrelevant, and it was agreed between the parties that this same objection should be deemed taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof.

Whereupon witness testified that, in his judgment, he would say there was somewhere between fifteen and twenty per cent of these lands that could be used for agricultural purposes. They are situated — a forty where one comes down to a stream or creek, there would be a few acres out of the forty that would be valuable for agriculture if cleared, but the majority of the unsold lands are further back in the mountains. The settlements of the country have taken up all of the lands that would be suitable for agriculture, and the lands that are left are the lands that are rough and mountainous, cov-

ered with timber, so that it would be very poor for agricultural purposes. For grazing purposes there would be a greater per cent than for agricultural purposes. Under the present conditions there would be only a very few months in the year that these lands would be valuable at all for grazing, but if they were logged, burned over and seeded, there would perhaps be the four summer months out of the year that stock could graze over—perhaps for grazing that would run sixty or seventy per cent of these lands.

Q. Now, let me put this question to you: This that you speak of as being suitable for grazing would be about 60 or 70 per cent provided the timber was cut off, removed, logged, and then the remnant burned, the stumps, and seeded to grass or some growth upon which the stock could have the summer range? Is that what I understand?

Mr. Rabb: Objected to as leading.

Mr. Fenton: Yes, I know it is leading.

A. Yes, sir; that was what I meant.

Whereupon witness testified that it would cost in the neighborhood of $40 or $50 an acre to clear this land suitably for this method of making it grazing, but not to take the stumps out. It would cost all the way from $100 to $150 an acre to remove the stumps and clear the land of roots, so as to make it available for agricultural purposes. The powder to blow out the stumps of one of these average acres of timber would cost from $30 to $50 an acre. One would use black pow-

der, and usually black and giant powder together. The black powder being a slow powder, it is usually used with the giant powder. These unsold lands are chiefly valuable for timber. It would hardly be considered first-class timber, taking it straight through, because all the best of it has been taken up by actual settlers. He knows that timber companies have bought a lot of timber lands from the company, and that the Booth-Kelly Lumber Company has bought a large tract of timber land. There is the Fisher Timber Company—in fact, all the timber companies operating in there.

Q. Then what remains of this grant that is unsold, that is timbered land, is what there is left after a good many years of these lands being on the market for timber?

A. Yes, sir.

Whereupon witness testified that the timber market about ten years ago was very low. He was in the employment of a timber company at that time, and buying timber, and since that time the market has been steadily increasing in value. There is a very little timber of any kind now that has a stumpage value of less than one dollar per thousand. The average value of the best quarter section of these unsold lands in Lane County would be in the neighborhood of one million to a forty, or four million to a quarter section, which would make the value of the quarter section $4,000. The best unsold quarters would be worth at least twice that. He has personal knowledge of a good many applications made

to the company by so-called actual settlers or purchasers of these lands at $2.50 an acre under this act of Congress of April 10, 1869, and these applicants always tried to get on the best quarter sections. Sometimes they make mistakes. He means by that that they try to get on the quarter section that has the most timber.

Q. Well, now, suppose one of these applicants to purchase one of these quarter sections should receive a deed from the company, and the company should accept the $2.50 an acre, and this purchaser should desire to use that quarter-section for an actual settlement for a home, what would be its value for him as a settler?

A. He couldn't use it for a home.

Q. Why couldn't he use it for a home?

A. It wouldn't pay him to do it. He couldn't make a living on it.

Q. Well, why? How would he get any value out of it?

A. The value would be in the timber.

Q. When and how?

A. Well, it has a market value now. He could sell it.

Q. To whom could he sell it?

A. Well, he could sell it. Mr. Wendling, of Wendling, Johnson & Company, is buying in that country there.

Whereupon witness testified that Wendling, John-

son & Company are big timber holders, who have bought large tracts in the western part of Lane County, and who purchased a million and a half of timber at $1.00 per thousand in the last two years. They would have to pay for this land if a man had title to one of these 160 acres thus acquired from the railroad company, the market price, which would be $1.00 a thousand. That is the lowest price he knows of.

Q. Then if a settler could buy this quarter-section for $2.50 an acre, he would get it for $400, and could immediately sell it to a timber syndicate for $4,000?

A. Yes, sir.

Q. Well, now, is that true generally of all of these applications to purchase of this class, that you know of, in that country?

A. Why, yes; generally it is true.

Whereupon witness testified that unless the land is within a Forest Reserve, in the even sections, the title to most of it in the even sections in Lane County within the limits of and adjoining these unsold railroad sections, has been deeded to those individuals. In the first place, patents were issued in the nature of a homestead, taken along the streams and valleys, and afterwards, in the timber, within the last ten years, these lands in the even sections have been taken as timber claims under the timber and stone act. In nearly every case where final proof has been made in homestead cases, if lands were timbered, in these even sections, the lands were sold to some timber company. Large timber holders own a

majority of these lands in the even sections in Lane County. No settlement is required under the timber and stone act. These lands entered under the timber and stone act were sold the same way, to large timber contractors. The Cascade Forest Reserve is in the eastern part of Lane County.

Q. Referring to this land that you say might be grazed land, what is the fact, if you know, as to whether any man could take a quarter-section of it, and use it successfully for grazing purposes, and make a living on it, if he was confined to his quarter section?

A. In my opinion, he could not.

Q. Well, when you speak of it being good for grazing, what do you mean?

A. Oh, in a general way.

Q. Do you mean that, if a man was a stock man and cattle man down in the valley, for four months in the year he could drive his cattle into this mountain range and let them roam over the thousands of acres there, the even and odd sections that might be unenclosed, and in that way get some benefit for grazing? Is that what you mean?

Objected to as leading.

A. Well, I had reference to odd sections.

Q. I understand. Well, now, suppose the odd sections were all divided into quarter-sections, which were fenced up, would it be of any particular value for grazing from which to make a living?

A. Not to take the tract as a whole in Lane County, no, sir, it would not.

Q. In other words, the grazing there would be in the way I have spoken of, the lands being out on the common, a man having headquarters, and his cattle could roam at large over a large body of land?

Objected to as leading.

A. Yes, sir.

Q. Is that what you mean?

A. Yes, sir.

Whereupon witness testified that he noticed the yellow body of Defendants' Exhibit 259, and that the town of Eugene appears to be in the center of the valley, on the Willamette River. Eugene is very near in the center, but it is a little bit closer to the foothills on the east side of the valley. The military road grant of the Oregon Central Military Wagon Roard shown in yellow, was given on account of a road built from Eugene into the central part of Oregon, and he believes that grant was prior to the railroad grant, but whether prior or not, the lands within that grant appears to have been lost to the Oregon and California Railroad Company. Eugene had a population of 9009 according to the census of 1910.

Q. What is the fact, if you know, as to whether there are any actual settlers within the limits of these unsold lands of the Oregon and California Railroad Company, on the even sections or on any of these lands

that have been heretofore sold by the company, if there are any?

A. Yes, sir; it is quite thickly settled.

Q. Well, you don't mean, do you, that the lands within the limits of the grant are quite thickly settled—these timber lands?

Objected to.

A. No; I mean this county.

Q. No; I didn't ask you about the county. My question was as to the settlements within the limits of these unsold railroad lands.

A. Well, in nearly every case where there is a stream that flows through the townships, there is settlement along the streams—all the streams.

Q. Are they many or few? I mean, now, within the limits of this grant, near these unsold railroad lands.

A. There are a good many close to the Willamette Valley; but after you go back toward the head, they are very scattering toward the head.

Q. State whether or not there are any settlers with homes in the indemnity limits of this grant, being ten miles on each side?

A. Yes, sir.

Q. Where are they? Where would they necessarily be?

A. They are along the streams and valleys.

Q. Are they few or many?

A. Well, the first ten-mile limit there are many.

Q. Well, I mean the indemnity limits, not the place limits.

A. Oh, the indemnity—that would be the thirty-mile limit, you mean?

Q. Yes, the thirty-mile limits. Are there any settlers in the thirty-mile limits?

A. Yes, there are settlers in the thirty-mile limits.

Q. Where would they be?

A. They would be along the streams.

Whereupon witness testified that he does not know the character of the lands, marked in blue, lands deeded by the Oregon & California Railroad Company on this Defendants' Exhibit 259. He is acquainted with the Booth-Kelly Lumber Company lands. They are very fine timber. He knows that the center of what are known as the Wendling mill, and operations of the Booth-Kelly Lumber Company, is in township 16 south, range 1 west, and range 1 east, and he is quite familiar with their holdings through that part of the country, and if the 70,000 acres of the Booth-Kelly Lumber Company are situated near there, it would be fine timber land, and would be the best as compared with the unsold timber land of the Oregon & California Railroad Company in that vicinity. It would be better than what the railroad company has left. The timber around Wendling would average between six and ten million feet to 160 acres. He is acquainted with the

timber holdings on the Siuslaw River, and in the watershed adjacent to or tributary to that river, in Lane County, within the limits of this grant. Porter Brothers own over 20,000 acres in Western Lane County; Wendling-Johnson Lumber Company about 30,000 acres; Sterritt & Hovey have over 20,000 acres; Stewart and R. V. Jones of Portland about 15,000 acres. These are the largest timber holdings, and they are considered fine timber. The character of the unsold lands of the company in that vicinity would be considered as second-class timber, but what would be considered merchantable within the meaning of the market, and he believes would average four million feet to 160 acres, but that would not include the burned areas. The burned areas are generally covered with salal brush. He could not give the acreage of the burned area, but knows that in Western Lane County—he thinks about two years ago—there was a fire that burned over in the neighborhood of fifteen sections of railroad land. This would be covered with brush. Some of it before the fire was heavy timber. The soil of the Coast Range is generally a clay soil, running all the way from a few inches to sixteen feet, with sandstone formation under that.

Q. What is the character of soil as to its being productive or otherwise; where it is burned over, what would it produce, if anything, that could be utilized, taking into account elevation and everything else?

A. The Coast Range is very productive in that part. The hills are not very high on an average. The summit is about 1000 feet above sea-level. The valleys

are very narrow, and numerous spurs—small streams; if the soil was level so you could farm it, why, there is some of it there would produce grain, or most anything in the way of vegetation.

Whereupon witness testified that the lands in the eastern part of Lane County, on the east side of the grant, are much higher and run all the way from 1000 to 3000 feet, some even higher than that. The higher the elevation, there would be more frost than at a lower elevation. This burned over country usually grows up with pea-vine, which can be used for grazing in the spring and earlier part of summer by cattle, a couple of months. On the Coast Range there is what they call rhododendron, black huckleberry, thimble berry and salal brush. He does not know of any animal that will eat salal bushes, but cattle will graze a little on salmonberry bushes. The huckleberry bush grows five or six feet high on an average, but stock does not feed on these bushes but very little. There are several points where there would be snow in the eastern part of the grant in Lane County, during part of the year. One point is called Mt. June. It gets its name from the fact that snow is usually there in the month of June. He recalls among the timber companies or timber investors that hold lands in Lane County, excepting the Oregon and California Railroad Company, Booth-Kelly Lumber Company of Eugene, Boston-Oregon Lumber Company, of which Mr. Winslow of New York is the head, who is also identified with the Indino Quartered Oak Company, also the Drew Lumber Company, of which

Wells Gilbert is agent, the Leffingwell Estate, for which Major Forrest is acting as agent at Eugene, two Brown Lumber Companies, one of Eugene and one of Cottage Grove that has some mills at Cottage Grove, the Wendling-Johnson holdings, of which Mr. Wendling, at Weed, California, is head, Porter Brothers, who have an office in Portland, Sterritt & Povey, with their head office in Chicago, for whom Elliott Bean of Eugene is agent, a tract owned by R. V. Jones of Portland and Mr. Stewart of Astoria, called the Western Oregon Timber Company, or some such name. The Weyerhauser Timber Company own considerable land in there. There is considerable land there that is known as the "N. P." land—Northern Pacific script, but he could not say how large an area of acreage there is of this Northern Pacific script, but knows there is considerable of it through the country. He has done business with most of these timber holders, and is well acquainted with them.

Whereupon on cross examination witness testified that he has resided at Eugene fourteen years; is thirty-six years old; lived at Bandon, Coos County, before coming to Eugene; is a civil engineer by profession; has worked for the Government and the railroad companies, and his work for the Government was Deputy United States Mineral Surveyor, sectionizing in the mineral surveys, but was working for a contractor. While employed in the Government work he was not under salary from the Government, but the mineral surveyors made the surveys. The work was done for the Government.

He did that work as deputy mineral surveyor, and did the work for contractors on Government work, and sectionized Quinault Indian Reservation in 1904 as contract work. He has also been chief engineer of the Pacific Great Western Railroad Company, with its termini at Eugene and the mouth of the Siuslaw River, which is under construction. He ran out the original line for this road. He has had something like ten years experience in timber cruising, perhaps a little more than that, since he started in. As a school boy in the summer months he started out first cruising during three months' vacation, and would work along first one thing, and then another; first as a chainman. He started cruising the timber by making an estimate of the timber. The first thing he did was scaling on what they call a dump, where the logs are hauled in before they are put in the river or on cars for transportation, measuring the logs with a scale. He cruised timber for the Booth-Kelly Lumber Company, Boston-Oregon Lumber Company, the Laswell Company, but these were for large companies. He might have done work for some other companies, but he does not call to mind. The most extensive work was for people in Lane County. He worked for the Booth-Kelly Lumber Company off and on something like seven years, and for the Boston-Oregon Company about sixty days, and during the summer months, one summer, for the Laswell Lumber Company. He was the cruiser and had a compassman with him when making the estimates on this timber. He has cruised timber for practically all of the people of Lane County, who

have been in the business of buying and selling. Before coming to Eugene he was in school at Bandon, and had no business. His testimony is confined to Lane County, and he wants it understood that his testimony goes only as to lands in that county, as far as he has been into it. From this map that he sees on the wall, and from his memory only now, he thinks that there is not more than ten sections in the western part of Lane County in this land grant but what he has been on one line of the section, in township 16 south, ranges 1 and 2 west, and 1 east; township 15 south, ranges 1 and 2 west; township 17 south, ranges 1 and 2 west; township 18 south, range 1 west and 1 east, he believes he has been over eighty per cent of the sections by being on the line. He means by being over it, by being on one line of these sections. The rest of the land in the grant, he is not so familiar with, only by a township, or in a general way, perhaps cruising one or two sections in the township. The ones that he is more familiar with he has just pointed out, or given by number and they are in the eastern part. Those in the western part with which he is most familiar are township 15 south, ranges 6. 7 and 8 west; townships 16, 17 and 18 south, ranges 6, 7 and 8 west. He has been over all but ten sections in the western part of the grant, that is an estimate. He is acquainted with townships 19, 20, 21, 22 and 23 south, ranges 1 west and 1 east; 1 east would apply only to townships 20 and 21 south, with which he is not so well acquainted. In ranges 2, 3 and 4, townships 20, 21, 22, 23 and 24, he is acquainted with these. It would be hard to say how

well acquainted he is with these, he has been over these townships considerably, enough so that if one would name any landmark there he could tell its location, or the topography of the country, map out the streams or the roads. He would know only from memory what sections they would pass, but would know what township they were in. He does not believe that he has cruised any of the lands in green on that map, Defendants' Exhibit 259. He was employed by the Southern Pacific Company in 1909 on a railroad survey, and by the P. R. & N. Co., or Lytle Road, built from Portland to Tillamook Bay as locating engineer for nine months, and located the lines from the mouth of Salmonberry to Satin Falls, and from the Nehalem around Garibaldi and Tillamook Bay. He believes that is a subsidary line now of the Southern Pacific Company; it was known at the time as the Lytle Road. E. E. Lytle, he believes, was the president of the road. He has never been engaged in locating timber claims in his life, or any Government land, excepting that he has bought relinquishments and placed script on them. He bought script and got the lands, when working for the Booth-Kelly Lumber Company. The valley referred to in his direct testimony as the Willamette Valley, is all farming country, and part of township 15 south, 2 west, is farming land, and a part of these green lands on this map in there is susceptible to agriculture and tilling, and there is considerable agricultural land in these green lands in townships 15, 16, 17 and 18 south, ranges 1 and 2 west, and there are settlers in all these townships. Eugene

is in section 31, in 17-3 west, the closest part, would be seven or eight miles from Eugene, and the farthest away would be twenty-five miles. There are settlers through townships 15, 16, 17, 18 and 19 south, ranges 5 and 6 west, and considerable of the land there is under cultivation. There are small farming lands around Goldson. Elmira is in the foothills of the Coast Range, in section 25, township 17 south, range 6 west, and there is some farming land around Blachley, in township 16 south, range 7 west. Triangle Lake is in Blachley basin, and there are farming lands about there. There are a very few settlers in township 15 south, range 8 west, that is what is called deadwood country, and the mountains are very high. It is a large range that runs out and makes Cape Perpetua. There are settlers in township 16 south, range 8 west. There are settlers around Green leaf, on what is called Lake Creek, in section 35-16 south, 8 west. There are railroad lands, colored in green, adjoining or in that section, as shown by this map, Defendants' Exhibit 259. There are settlers in township 18 south, range 6 west. Ivison used to be a post office, in township 18 south, range 7 west, but the party who was there has sold out and left, and there is no one living there now, and there are some settlers in that township. There are a very few settlers in township 18 south, range 9 west, in the southeastern portion, which is back taward Roman Nose Mountain, and is a very high, rough country. There are settlers in all of these townships excepting there might be one or two townships out of the grant where there would not be

any settlers. These would be eastern townships. From the way the township lines run, there is not a township but which hits a stream, and every stream would have settlers on, so there would be no township where there would not be any settlers, but by naming a township there would be settlers in it, for the reason that the township lines are more than six miles from one stream to another. It would be possible to carve out a six-mile square, the boundaries for a township, which did not contain a settler, but he is not positive as to that. He would not want to be understood to say that there would not be such a condition existing there. There are not very many settlers in township 15 south, range 2 west, only on the Willamette side, where the township goes down into the land marked in yellow. That township is a mountainous country, and not merely foothills. It is what is called the Coburg Mountains, the range that comes down from the watershed between the Calapooia and the McKenzie rivers, and the general direction is westerly until it reaches near township 15 south, 1 west, and then it swings around almost south and enters some high hills just north from Eugene, making a gateway. If one would notice from the topography of the country that the Mohawk River flows south, and the coast fork flows north, going through a narrow gap at Eugene, caused on account of the topography of the country, there is quite a high range. The Mohawk flows through township 15 south, 1 east and 1 west; 16 south, 1 west and 2 west; 17 south, 2 west, in confluence with the McKenzie

River. The Mohawk Valley is an agricultural country. The part of the grant in the western part of Lane County has considerable good clay soil, and in this ridge west of the Mohawk River there is some clay soil on that; but the other part, on the slope of the Cascade Mountains, the soil is not so good; there is considerable more rock, there would be a part that could be farmed if the country was level. When one gets near the summit of the mountains, the clay soil has washed, eroded, slid off, so that it is very shallow, and this would be universally true, in the entire country, back into the higher elevations, the higher mountains, the soil would be so thin it would not amount to anything. The timber is poor there. The burned area is over the higher elevation. As a rule, the better the timber, the better the soil. He was born on a farm, raised on a farm until he was ten years old, and that is his only experience in farming, and he would not attempt to say that he has any knowledge, except a general idea, spending most of his life in the country he has learned somewhat. He has spent his life out of doors in the fields, and his work has been such that he had to stay with farmers at their homes, cruising timber, and so on, and he would not want it to be understood that he did not know anything about farming. His farming has not been as an expert, but he would think that he knew something about it, but not as an expert farmer, but by coming in contact with and being around farmers. He never has engaged in farming for a livelihood, and has never taken a homestead, and never settled on any lands, timbered lands, or attempted to clear

them, or anything of that kind. He does not remember of cruising any of the unsold railroad company's lands in Lane County. He has cruised some that have been sold.

Whereupon on redirect examination, witness testified that the lands with agricultural possibilities in the Mohawk Valley, would average half a mile wide for a couple of townships, and narrows then into numerous small streams and valleys; part of it goes out into little branches. The waters in Mohawk Valley are called the Mohawk River, which empties into the McKenzie River. Eugene is about seven miles from the mouth of the Mohawk River, and the mouth of the McKenzie River is about six miles in almost due north direction, and the Mohawk in a northeast direction. The McKenzie River empties into the Willamette River. The valley along the McKenzie through the land about which he is being interrogated, would be south of the McKenzie, which flows close to the foothills to the north. There is a valley along the McKenzie River that extends up a few miles about Waterville, sixteen miles from Eugene in an eastern direction. The McKenzie is one of the wildest and most rapid streams in Lane County, and its waters are the source of fine power sites, and it heads in a very high altitude, in Fish Lake and Clear Lake. These water power sites, on a straight line, must be from seventy-five to eighty miles easterly from Eugene, in the Cascade Mountains. The lands in the Mohawk and McKenzie Valleys, after one enters the foothills of the Cascade Range, that are agricultural,

are small tracts or parcels, and that is true with respect to any of the lands on these streams within the limits of this grant.

Q. Now, counsel asked you if there were not settlers in practically all these townships within the limits of this grant in Lane County, Oregon, and I believe you answered that, possibly with the exception of one or two six-mile squares, there would be a settler or settlers. What character or kind of settlers do you refer to, and where would they be situated?

A. They would be along the streams.

Q. And how much arable land or agricultural land would there be on a homestead or a claim of any one of these settlers thus described by you, and what would be the character of the rest of their holdings.

A. That is where the streams flow through the land that is unsold?

Q. Yes.

A. Why, they would in most cases be small.

Q. What would be the character of the bulk of their lands?

Q. What would be the balance of the quarter-section or 160 acres of this settler, aside from that portion that he might make a garden on, or pasture a cow on, or utilize for any useful purpose as agricultural or horticultural land?

A. It would be valuable for the timber that is standing on it in most cases.

Q. These settlers that you refer to, what character of settlers are they—what kind of entries?

A. Why, I think most of them are homesteads.

Q. What is the fact, if you know, as to whether these lands that are thus settled are chiefly valuable as a quarter-section for timber or for agricultural purposes?

A. Why, in the western part of Lane County, most of the settlers have sold their lands and moved out. Their buildings are there yet.

Q. Buildings vacated?

A. They are vacated; and timber men have bought the land for the timber that is on the 160 acres.

Q. Now, these settlers that are still there, where they have made final proof, what is the chief value of these entries or lands that they have within the limits of this grant?

Q. You may answer.

A. Why, in most cases, they would be valuable chiefly for the timber.

Q. How does the timber on these entries, as timber, compare with that that is on the unsold portion of the grant of the Oregon & California Railroad Company, as to quantity and value in proportion to the acreage?

A. Why, usually on the homesteads there is twenty or thirty acres that has been burned over and the tim-

ber has been killed, so taking it in proportion to the claim of 160 acres, why, I think in most cases it would be a less amount of timber. That might not hold true with timber that is away back, but with the adjoining timber.

Q. Yes, what I mean to inquire about is, is the timber on these homesteads that are still occupied substantially the same kind of timber, and quality, as the adjoining railroad unsold quarter-sections?

A. Yes, sir; certainly.

Q. How extensively have these homestead entrymen abandoned their homesteads? I mean, after they proved up and sold to timber people, how extensive and general is that in Lane County, in the timbered section within the limits of this grant, if you know?

A. Why, it is quite extensive, and some places they have moved out so that where there was a schoolhouse and a postoffice, why, the buildings are standing there, but without any one occupying them.

Q. What has happened to postoffices in some instances?

A. They have been discontinued.

Q. What has happened to the school?

A. Well, there is no school there. I presume there is a school district, but they don't have any school. There is no one to go.

Whereupon witness recognizes the official bulletin known as "Thirteenth Census of the United States,

1910," prepared by the "Bureau of the Census, E. Dana Durand, Director," showing the population of Oregon, the number of inhabitants by counties and minor civil divisions, prepared under the supervision of Wm. C. Hunt, Chief Statistician for Population, and recognizes the same as the official bulletin issued by the Census Bureau.

Whereupon defendants offered the same in evidence marked "Defendants' Exhibit 317," which was received in evidence and is hereinafter set out and described and made a part of this Statement of the Evidence and identified as such.

Whereupon on recross examination witness testified that there is quite a fruit country a little south of Eugene, and at Creswell there are quite large orchard tracts in the stage of growing. The Bornstadt Company has purchased a large tract, but he does not believe any of the trees have borne any fruit yet, but it is considered good fruit land. That tract has been planted to trees for several years, and there are trees growing on it. There may be among the foothills, on the streams, a portion of these unsold lands of the company that could be used as fruit lands.

Q. Isn's it a fact that quite a large amount of that land could be used for raising grapes, for instance, that might not be available for raising grains?

A. I presume grapes would grow on it; but it would not be practicable, on account of the steepness of the ground.

All of the best land there has been sold and taken up, and only the roughest remains in Lane County, and while his testimony may seem to show that it is one-sided, trying to make it appear that the country is rough, it is simply because the best of the land is gone and this is the part that was considered the roughtest and farthest back that has remained. There are certain benches, table lands, in townships 15 and 16 south, range 1 west, that would be parallel with the ridges, following along out parallel, between the directions of the streams and the ridges running through a part of these townships, that could be used for fruit and grapes. It would not be very wide, but it would be parallel with the streams that would extend through the township. In the valley the fern land has been killed out. There is none there now. Most of the valley land is under cultivation. There may be very small patches in there of fern land, but one could not, generally speaking, say that it was fern land. He believes there have been large areas of fern growth there, by the evidence one can see—referring to the Willamette Valley. There is some dairying land within the vicinity of these granted lands. Cottage Grove is situated within the vicinity of this granted land, and there is a creamery there. Cottage Grove is twenty-two miles south of Eugene, in section 28, township 20 south, range 3 west.

Whereupon on redirect examination witness testified that he does not know of any vineyard of any size in Lane County, that is, a commercial vineyard. He knows of one or two grape vines, but would not call them a

vineyard. There is no one in the business of operating a commercial vineyard in Lane County, and he does not know of any grapes ever being grown on these lands in the grant. The Willamette Valley does not seem to be suited to grape culture. There is no one in that business in Lane County. Cottage Grove is on the main line of the Southern Pacific, south of Eugene, and between Portland and San Francisco. That section of the country has been settled up ever since he can recollect. Lane County is not considered a dairying county. Tillamook County is considered a dairying county. But there are some creameries—there is one creamery in Eugene, but he does not know of any one who has a large herd in that county. The dairying land within the limits of the unsold portion of this grant, either on the even sections or on the unsold lands, would be very small, if there is any.

Whereupon on recross examination, witness testified that he believes the only Government land open to entry in Lane County that is available, is in the Forest Reserve, and it is subject to certain restrictions and regulations so that no one has taken it up.

Whereupon JACKSON F. KIMBALL, called as a witness on behalf of defendants, being duly sworn, testified that he is thirty-nine years old, resides in Klamath Falls, Oregon; has resided there for ten years, and is by occupation a timber cruiser, which has been his business chiefly. He is local representative of the Weyerhauser Timber Company and subsidiary companies in Northern California and Southern Oregon, and is sec-

retary, treasurer and general manager of the Forest Fire Association for Klamath and Lake Counties, the objects of which is the protection of timber from forest fires during the summer season. All the timber companies in Southwestern Klamath County, and most of the larger owners in Northern Klamath County, are members of the Association; and there are, in round numbers, about 500,000 acres of timber lands represented in this Fire Association. These lands, thus represented, are embraced in what is called the Pokegama Plateau, which takes in what is called the eastern part of Jackson County in the high Cascades, and all the timbered lands out to the Klamath Basin; and that is what is called Unit No. 1. The balance of the timber in Klamath and Lake Counties, is operated in connection with the United States Forest Service, but he could not give the acreage of timber land in the Forest Service in these two counties. The Weyerhauser Timber Company owns altogether down in that country 300,000 acres; that is, the Weyerhauser Company and its subsidiary companies. He would have to look up his notes to be sure about this. They have in the Pokegama Plateau, or in Southwestern Oregon and in Jackson County, between 80,000 and 90,000 acres. These lands that are in that patrol are either in Jackson, Klamath or Lake Counties. In the patrol of the Weyerhauser Timber Company and the Weyerhauser Realty Company, are something like 250,000 acres of timber lands, called a yellow pine tract. There is some fir mixed in the holdings. They consider it a good tract for the

timber. Defendants' Exhibit 316 shows the holdings of the Weyerhauser Land Company, and the red coloring on the maps represents the Weyerhauser Land Company, the yellow the Pokegama Sugar Pine Lumber Company, and the green the Pelton-Reid Sugar Pine Lumber Company. He knows from personal inspection, or cruising, or from having been over the land at some time in the past, the lands shown on the maps in red, being map No. 1, the acreage of which he would have to guess at, but would say around 70,000 acres in the Southwestern part of Klamath County and the Southeastern part of Jackson County. He is familiar with the tract as far west as Range 4, and he has been in portions of townships 38 and 39, range 3, but very little. Range 4 is practically on the top of the Cascades. To which testimony complainant objected to as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be deemed taken to all the testimony of this witness, relating to the character of these lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified that the general character of that country in that vicinity, within the limits of the grant, with which he is acquainted, is a timbered country on the divide of the Cascades. The lands marked black, with which he is familiar, do not represent the best lands in there by any means. By that he means that the most of the better sections belong to some of the timber companies in there. Referring to Defendants' Exhibit 259, the unsold lands

of the Oregon & California Railroad Company, shown in green, with which he is familiar, generally speaking, are timbered lands, and chiefly valuable for timber. The timber is yellow and sugar pine, white and red fir, what they commonly call larch, which is botanically known as Shasta, or Noble fir. The most valuable lands of the country are in the Jenny Creek country, meaning the lands marked in green. They are timbered lands, and as a rule are covered with white fir, or very old burn, which evidently happened a good many years ago and left those high points with nothing but brush on them. The soil on these railroad lands, with which he is familiar, in the eastern part of Jackson County and the western part of Klamath County, is generally in the high country, and it is more or less rocky and brushy. The percentage of what they call agricultural land in that country, would be very slight, as to those lands with which he is familiar. It would be an awful guess to give the percentage. There are very few acres comparatively. His company owns in there, in the association, 77,000 acres, in round numbers and he should not imagine there were a thousand acres altogether in that 77,000 acres that would be suitable for agricultural or horticultural purposes. There would be little spots, little glades, as they call them—there are a few little spots on the headwaters of Jenny Creek that it is possible a settler might clear a few acres of land and raise a little garden. While that country is very brushy, he has figured in offering this tract to sheepmen, that being a portion of their business in all the rest of their

lands which are under lease, that that entire area in these would carry 20,000 sheep. By that he means all running west of the Klamath River, all of that country in through there. In figuring that over, they also included the territory which is open country in Northern California, and they figured that they would range over a territory, roughly speaking, of about one million acres. The sheep are herded, starting in the low lands early in the spring, with what they call the spring range. The sheep work as the snow recedes, north into the high hills. Starting along in April, lambing time down in the lower country, the sheep would run to Thanksgiving possibly; that is, they would work up in the high hills for possibly four months during the summer, and gradually work back when the storms came on, until they were down in this open land. About half of this one million acres is in California, as he estimates, and that portion is generally an open country. The sheep would be on the timbered portion of this one million acres, which he says would be about 500,000 acres, depending upon the season, but he would say generally about four months. There are seasons favorable, which would mean five months. The people that would own or have 20,000 sheep, or such large bodies, are still to be produced. They have been offering these lands for the last four years in an effort to get sheepmen in there, and so far it has not proven attractive to the sheepmen. They are trying to pursue exactly the same methods which the Forest Service attempts to carry out in selling the right to graze on these timbered lands. He believes that it is a good thing for

their timber, and incidently produces a little revenue. As sheep graze they are herded and graze the lands closely, and there is a good deal of the inflammable material which is on the ground during August, the dry season, that the sheep either eat up, or tramp into the dust, make it into dust, and thereby reduce their fire risk. These sheep are always accompanied by shepherds or herders. The sheep are usually divided into a band of 2,000. In that country down there it is very brushy and a wise sheepman would probably not have over 1,500 sheep, and they generally figure on a camp tender for three herders, not over that. The presence of these herders and campers, they think, is very good. They have a stipulation with them whereby they are to observe certain rules and regulations which the Forest Service has found advantageous, and which they have also found, in reference to care in building their fires; and also in case of a fire, their interests are identical with the Weyerhauser Timber Company, in suppressing them.

Q. Now, Mr. Kimball, suppose that a settler, under the act of April 10, 1869, should apply to the railroad company to purchase a quarter-section, whether in legal subdivisions by 40's, or a string of 40's, or in any way that it might be sold to him, and the company should sell to him, as an actual settler, at $2.50 an acre, any of these lands that are unsold, or in that general vicinity, and he would be expected to confine his activities to his own quarter-section to make a living, either by grazing sheep, or by raising cattle, or by agriculture or horticulture, or any use that he could put this land to as an

actual settler, state, from your knowledge and experience, what would be the result of his attempt to make a home on this quarter-section?

A. If he could use that quarter-section as a basis, whereby he could lease a large area in there, either from the timber companies, the railroad company, or from the forest reserve, a band of sheep of 2000 head would support a family.

Q. How much range would that 2000 sheep have to have on these lands?

A. Well, it is safe to say that they would need in there 200,000 to 250,000 acres.

Q. My question supposes that he is buying this for a home, now?

A. Pardon me, I want to change that. We figure down in there not less than ten acres to a sheep. That would be 20,000, wouldn't it?

Q. Yes.

A. My multiplication is wrong.

Q. But suppose he was confined to his quarter-section, and all the quarter-sections were fenced, if that were possible, what would he be able to do with that quarter-section in grazing or farming, or horticulture, or anything else that would enable him to make a living?

A. There are little spots in there where it is possible that a man might make a living, although the only way they have been able to do it is supplemented by trapping and working out. As far as being dependent

on the soil is concerned, I don't know of a single vacant piece of land in that country—by that, I mean, including the railroad land—where it would be possible for a settler to make a living from the land itself.

Q. Now, there are about seven or eight thousand applicants in this record for the purchase of quarter-sections under the pretense that they desire them for homes, actual settlement, at $2.50 an acre, and in 160 acres, or quarter sections. Within your knowledge in that section of the country, would these actual settlers or would they not be able to make a living on the quarter sections?

Q. You may answer.

A. It would depend.

Q. I mean confining it to the land, to the quarter-section.

A. It would not seem possible to me. Occasionally there is a man that can live on practically nothing, but the average man going in there, I doubt if he could select an area in there where he could raise sufficient produce to support him.

Q. Why would he not be able to raise on a quarter-section sufficient produce to support him—what is the reason of it?

A. The general character of the land in there is not productive, even grain, or any other natural product of the soil.

Whereupon witness testified that the fine fruit lands

in Jackson County are principally in the Rogue River Valley. He is not familiar enough with it to give definite information as to the area of the Rogue River Valley, or how long or how wide it is. He imagines that it is the area which is colored in yellow, pointing to the yellow field in the vicinity of the Rogue River and around Medford, in Jackson County, shown on Defendant's Exhibit 259. He does not know from personal knowledge anything about the character of the Weyerhauser holdings, shown on map No. 4 of Defendants' Exhibit 316, and only knows that the Weyerhauser Timber Company has acquired them for timber purposes. He has very little personal knowledge of the lands shown on map No. 2 of Defendants' Exhibit 316. He cruised in there for awhile, on Little River in Douglas County. These lands of the Weyerhauser Timber Company, with which he is familiar, are covered with a heavy stand of yellow and white fir. Those that he cruised were very good. It is so long ago that he does not remember exactly, but he thinks something between 25,000 and 50,000 feet to the acre. He is not familiar at all with any of the lands shown on map No. 2 of Defendants' Exhibit 316, showing in red the timber holdings of the Weyerhauser Timber Company in Lane and Douglas Counties, in the vicinity of the West Fork of the Willamette River, and the middle fork of the river, and in the vicinity of Wildwood, in Township 22. He is not familiar at all with the lands shown on map No. 3, of Defendants' Exhibit 316, showing in red, lands in the eastern part of Marion County, on Little River, North Fork; also on the San-

tiam River in Linn County, within the limits of the grant and outside of the limits of the grant, in the eastern part of Lane County and some scattered sections in the eastern part of Lane County. His knowledge is chiefly confined to the lands of the Oregon & California Railroad Company and other timber owners in Jackson and Klamath Counties. Whereupon defendants offered in evidence these four maps, Nos. 1, 2, 3 and 4, of Defendants' Exhibit 316. To which complainant objected as not properly identified. Which was received in evidence and is hereinafter set out and described and made a part of this statement of the evidence and identified herein as such. Whereupon on cross examination witness testified, that he is the local representative of the Weyerhauser Lumber Company, and its subsidiary companies, in Southern Oregon and Northern California. He does not know approximately how much land the Weyerhauser Timber Company owns in Oregon, but it owns many thousands of acres, and he presumes, although he does not know, that it is one of the largest land holding companies in the United States. He is acquainted with the lands referred to in his direct examination, described as beginning in the west of Townships 38, 39, 40 and 41, all in Range 4 East; and then Township 38, Range 5 East, down to the California line, and Range 6, beginning with 36, and running down to the California line, in fact from Range 6 East, where the yellow pine occurs in all that country, he is more or less familiar with. He does not mean to say that he has been over every

quarter-section, but in a general way he has been over these townships. A great deal of it he has cruised by forties. He has been engaged in the timber business about twenty years, and it is practically all he knows. In their business down there, since they have started in the leasing business, it has become necessary to get more or less information in reference to farming, but his farming experience is all theoretical. The Weyerhauser Timber Company is about through acquiring timber lands in that section of the country. They have acquired quite a little chunk; timber is what the company is engaged in and that is what it is after; it does not deal in agricultural lands at all, unless it is for timber. It is not dealing or investing down there, generally, in real estate. With reference to the ranging of sheep, about which he has testified, they have all of their lands leased east of the Klamath River; but none in that area which they call the Pokegama Plateau—the Jenny Creek belt. They have large areas of grazing land throughout their timber holdings. Whereupon on redirect examination witness testified that he could not tell the exact acreage of lands they had leased in Oregon, but approximately it is about 200,000 acres. They are all leased to sheepmen and for the purpose of sheep grazing. They leased from year to year and they generally figured about as the Forest Service does, that five acres of range will carry one head of sheep, they have found. They leased only from year to year in Oregon. The sheep man goes in about the first of June, and generally leaves the range by October first; in the high mountains the time is

shortened very much. The leasing business is carried on by the company in that way, partially to get a little revenue and partially to get a little fire protection. The sheep men pay them five cents an acre per annum, generally. They have a little land north of the Klamath Indian Reservation that is not productive. The market price, so far as they are able to get at it, is five cents per acre; that is the price that the sheep men are willing to pay them. If a man had 160 acres of that kind of land, at five cents an acre, he would get $8.00 a year. That is the best that they have been able to do and they are in the business for what there is in it. Generally these people that rent that land in there this way, are large sheep men. He always tried to play fair with the natural users of the range, but in the very nature of things it gravitates to the big men. The little man cannot afford to pay often times what the big man can. The headquarters of most of these men are at Lakeview. Most of the sheep winter on the desert, as it is called; that is a vast body of public land that lies east of the timbered tract in Lake County, which is naturally in the western part; and as a rule they have to drive from about 50 to 100 miles from their winter range to their summer range. The District Forester of the United States gets for the lands within the Forest Reserves in Oregon, where they lease to sheep men, or cattle men, seven cents per head for summer range, and it varies up to, he thinks, thirteen cents, including the lambing range. That is an open country, that is not timbered, is furnished to sheep men where they lamb. The Forest Service fig-

ures stock per acre, for leasing purposes, about the same as they do, generally. There are territories where it takes a great deal more land, and other territories don't take as much, but on an average about five acres to a sheep. The Forest Service charges seven cents a head for their summer range, and his company charged equivalent to twenty-five cents a head, and he thinks they are getting considerable larger incomes than the United States. There are reasons for that all right enough, under their rules and regulations. The lands within the Forest Reserves are known as timber lands. There are, of course, spots in the Forest Reserves that have agricultural possibilities.

Q. But what, relatively, are these lands in the United States Forest Reserve as compared with the unsold lands of the Oregon & California Railroad Company in eastern Jackson County and western Klamath? How do they compare, if you know?

A. The lands of the railroad company that I am familiar with are located on the high Cascades or on the slope of the Jenny Creek plateau, and there is mighty little stuff in there that is much account. But further north, in the forest reserve, there are quite a good many little meadows, natural meadows, in the high plateau country—if that answers your question.

Q. I am referring to the timber character of the two classes of lands.

A. Oh, it is about the same, as far as the kind and amount.

Q. You mean by your answer that in the forest reserve there is probably a fraction more land that could be utilized for grazing, or for agricultural purposes, in that section than in the railroad lands?

A. Yes, I think so. A little further north there are quite a number of spots in there that is good grazing land.

Whereupon, on recross examination, witness testified that in the comparison he was referring to the Crater National Forest. The Forest Reserve is not run as a money making institution; it would naturally charge much less than a private concern would for the use of the range in the Reserve. There are a good many reasons why it is necessary for them to do that. The settler has rights that a timber company does not have to recognize, but the Forest Service does have to. It is very natural that the conditions should be different; and then, of course, his company is out for all there is in it. He would lease his range to the small holder, or small stock man, the same as a large one, if by doing that it did not put them in a position where they could not lease all their lands. They might have a man who would want a choice bit of grazing land in their territory, and by renting to him they would be prevented from leasing a whole lot of other land, and they would probably turn him down as a business proposition. That is the way they look at it. It is a fact that they consider the good will of the settlers living in the vicinity of their lands as some consideration in leasing the lands, a very vital consideration, there is no question about that.

Whereupon MILFORD JACOBS, called as a witness on behalf of defendants, being duly sworn, testified, that he is fifty-four years old, resides at Tacoma, Washington, and his business has always been logger and timber cruiser; he has been a timber cruiser, done nothing else, for the last fifteen years. He has cruised timbered lands in the states of Oregon and Washington, and worked mostly for the Weyerhauser Timber Company. He has cruised timber lands for the Weyerhauser Timber Company, and its subsidiary companies, in the Coos Bay country, and in the country north of Eugene, the Calapooia Range country. He has seen Defendants' Exhibit 316, from a distance, and looked at these maps, and says that he has done a lot of work in the Jenny Creek Basin, in Townships 38, 39 and 40 South, Range 5 East, north of the line of California there, and has cruised lands, he could not say how many acres for the Weyerhauser Timber Company, in the Jenny Creek country. He was sent in there to look over that country, to see what it was, as a timber proposition, and then he did a lot of work cruising afterwards. In going through the country they took notice of the conditions of the country, whether it was a timber proposition or not. He has no recollection of the lands shown on map No. 4 of Defendants' Exhibit 316. He has done quite a lot of work on the lands shown in red colors on map No. 2 of Defendants' Exhibit 316, in Coos County, near the Umpqua Forest Reserve; and also the lands in Coos County and part of Douglas County, east of the Umpqua Forest Reserve, shown on this map. He has done

work on the east side of this No. 2 of Defendants' Exhibit 316, in the eastern part of Lane and Douglas Counties. He has done some work there. He became somewhat acquainted with the conditions of the whole country in doing work on these lands of the Weyerhauser Timber Company. The Weyerhauser Timber Company did not buy isolated tracts of timber. They would not buy a piece of timber unless it was a timber country. The method of cruising depends on how close a cruise is wanted. If it is wanted very close, in a few acre tracts, he counted every tree. If it is wanted extra close, he took calipers and measured it; he didn't usually do that. He usually takes acre tracts and counts them and makes an average of every ten acres. There is a report goes in on ten acre tracts. His reports would show of these lands cruised by him for the Weyerhauser Timber Company, in these various localities, that he cruised about 25,000 feet to the acre, but that should be raised about forty per cent, because it was cruised quite a number of years ago, when they did not cruise closely. The price of these timber lands has advanced and the market has become more active, and cruisers are expected to, and do as a matter of fact, cruise more closely; they cut a great deal more closely. There is a great deal more timber cut off of an acre now than there was ten years ago, because timber is worth more. Stumpage has gone up and they cut it closer. The market value of stumpage runs in the neighborhood of a dollar a thousand. Different pieces and different localities will vary, but that is a fair average. The price

in the Columbia River country, known to the loggers of Portland and the timber buyers and mills of Portland and tributary to the Portland logging market, will run from $1.50 to $2.50 per thousand. He does not know whether logs produced from these timber lands that are tributary to the Columbia River market for Portland go clear to Astoria or not. He has never been down there. As far as he knows, they were logging what they could to take to Portland. He knows the price of stumpage for logs in the Nehalem country, in Tillamook County, that is, not the timber that has been logged to the present time, he couldn't, but the land that is on the market for sale he has knowledge of the stumpage prices. They quote stumpage in that section of the country, at the present time, at $1.00 a thousand, and they base their price on $1.00 a thousand stumpage, which is the market value. There is a good deal of timber in Lane and Douglas Counties, along where the Weyerhauser Timber Company has made its investments, which only has a speculative value at the present time. It is held for speculation. It cannot be utilized at the present time, and it depends somewhat on who holds it as to the market value, whether it is a large company or a small individual. Whereupon complainant objected to the testimony of witness as to the character of these lands within the limits of these grants, as incompetent, irrelevent and immaterial, and it was agreed between the parties that this same objection may be

deemed taken as to all the testimony of this witness relating to the character of the land within the limits of these grants, settlements thereon, and public land entires thereof. Whereupon, witness testified, that the timber in the Jenny Creek country, with which he is familiar, will run largely to yellow pine. There is quite a per cent of sugar pine down the Pokegama, and as one gets up and into the hills it runs more yellow pine, and some white pine.

Q. What is the character of the unsold lands in the Jenny Creek country? I mean the lands of the Oregon & California Railroad Company that are in the eastern part of Jackson County and in what we call the Jenny Creek country, if you know?

A. Why, the land there, it is practically all the same thing. There are a few little clearings along Jenny Creek. They are small. And there is some open country there, but the land is a timber proposition.

Whereupon, witness testified, that these lands of the Oregon & California Railroad Company in that section are chiefly valuable for timber. The unsold lands of the Oregon & California Railroad Company, belonging to that company in Jackson County and in the Jenny Creek country, marked in green on Defendants' Exhibit 259, are not very heavily timbered. The best of the timber has been sold for timber purposes. He accounts for the fact that the best timber has been sold, and is now held by other people, because these people were buying timber in there and they bought the best.

He cannot tell the year when the market for these railroad timber lands, in that section of the country, first became more or less active. The Weyerhauser people went in there about eight or nine years ago, possibly ten years ago. Under present conditions the unsold lands of the Oregon & California Railroad Company, with which he is familiar, in the Jenny Creek country and in the eastern half of Jackson County and western half of Klamath County, have no value for agricultural purposes. They would have some value as a grazing proposition. If one would limit grazing possibilities to a quarter section, if it lay aside of a piece of land that was suitable for agriculture on a creek bottom, it would be of some value as a grazing proposition. There is very little land there that could be used for agricultural purposes, in the unsold portion of this grant, with which he is familiar. He has never come in connection with a grazing proposition, but knows in a general way about grazing sheep over large areas of land. These lands of the company could not be utilized for grazing purposes in any other way than as stated by Mr. Kimball. Where the majority of the lands has been bought up in the eastern half of Jackson County and the western half of Klamath County, the lands that remain would naturally be poor soil, because the heaviest timber grows on the best soil mostly; that is invariably the rule. When one gets timber, he gets fair soil; when one gets poor soil, he gets poor timber. In that country down there where the yellow pine grows, is clay soil and shale, being broken rock. There is a good deal of it rocky. Some

places it is all clay.

Q. Is it or is it not productive after the timber is removed, or is it fit for anything, if you know?

A. Yes, there is people in all of that country there in different places, scattered settlers there, that have a little creek bottom, and they farm what they can, and work up on the sides. Sometimes they raise a little on that other land outside of the creek bottom; sometimes they don't.

Q. When you speak of these people living in there, you refer to small settlements in the little valleys and creek bottoms?

A. Yes.

Q. Are there any settlers on the even sections within the limits of these timber belts?

A. Along the river.

Q. But they are only on the lower streams?

Objected to as leading.

A. River and streams. After they get up the creeks they have to irrigate, but along the river bottom it is wet enough so they don't have to irrigate.

Q. What are these river bottoms? Are they small or large?

A. They are small tracts.

Q. When you speak of small tracts, how many acres would you speak of as capable of agricultural uses

even along the river bottoms?

A. Along the river bottoms; oh, there is possibly, in twenty-five miles there, or twenty miles, get outside of the timber area there—take it from Klamath Lake, the lower end of Klamath Lake——

Q. I mean within the limits of this grant, now—within the thirty-mile limit of the grant, and not including anything that is outside of the grant?

A. I don't know just where your grant comes, where it is located in regard to Klamath Lake.

Q. Look at the map, Defendants' Exhibit 259, Mr. Jacobs, over here. Here is Medford.

A. Here is Klamath Lake here. That is outside.

Q. This map shows the indemnity limits of thirty miles, and the place limits of twenty miles, and in green shows the unsold portion of the company's lands in Jackson County. Now, the question is, where are any settlements within the limits of that grant, on the even sections, if there are any, in the unsold portion?

A. Oh, there is two or three halfbreeds live in there.

Q. Two or three halfbreeds—pointing to what place, Klamath River?

A. Yes, I expect some of them is on that river.

Q. In the Klamath River country?

A. Yes.

Q. Well, now, the Klamath River has no valley,

except small and narrow?

A. Very small, narrow valley.

Q. How wide?

A. Oh, that valley there is in the neighborhood, probably—in that one place, two or three halfbreeds have probably got forty acres that they cultivate in there.

Q. Are there any settlements in the Jenny Creek country within the limits of this railroad land?

A. There are two or three families live where the old stage line crossed Jenny Creek, and upon the head of the creek there are some other people, right in here.

Q. What kind of settlements are they that they have?

A. They are keeping cows up in there. At the upper end of that Jenny Creek is a poplar growth brush, and it is quite easily cleared, that is, three or four hundred acres up there that could be cleared at a reasonable cost.

Q. Where do they range their cows?

A. They range unfenced land, the whole territory. It don't confine the cattle to their own range.

Q. Suppose a settler was to go in there and get a quarter-section of this unsold railroad land at $2.50 an acre from the railroad company, taking the quarter-section according to legal subdivision of forty acres in a string or in a square, whichever way it was best for him,

and he was expected to confine his way of making a living to that quarter-section, was not permitted to range his cattle or his stock over the unenclosed lands outside, and was expected to have this quarter-section used for every purpose that it could be used, either for grazing or for raising garden, or horticulture, or grain, or hay, or any agricultural or horticultural purpose, I wish you would state to the court, from your knowledge of these unsold lands, whether or not such a settler, under such circumstances, could make a living on any quarter-section there, or any considerable number of them?

A. Well, there possibly could be picked up a section of land on the head of Jenny Creek that would support life.

Q. That is to say, out of this total area, you think there might be as much as a section that could be gathered together?

A. I think maybe.

Whereupon witness testified that the balance is timber lands. There are places there where it is covered with loose rock, quite large, washed off, had very little timber on it. It has no value as agricultural land. He does not think that he stated the per cent, that he thought of the total which would be agricultural in the Jenny Creek country in the timber area, and not including lands that are comnig under the irrigation ditches, within the limits of the grant, in the unsold portion. Including land that might be irrigated, he thought that two per cent could be used for agricultural pur-

poses. He cruised some land in Coos County, and in the western part of Douglas County, and above Eugene; but he did no cruising on the Siuslaw River in the western part of Lane County; he might have on a little tributary to it, but not down on the river. He cruised some lands as shown on one of these maps, pointing to the lands southeast of the Umpqua Forest Reserve and west of the head waters of the Millicoma River, and his recollection is they were in Townships 23, 24 and 25 South, Range 10 West. He found that land to be rolling, quite well up, good elevation, and young growth of timber, that was about twenty years old, as he understood it. It was fir timber and he did not believe that this land was chiefly valuable for anything except timber. It was a timber proposition. He cruised most of the lands in Townships 21, 22 and 23 South, Range 1 West, and some in Townships 22 and 23 South, Range 2 West; that land is a timber proposition. Practically none of that land colored in red is suitable for agricultural purposes. When the timber is removed it may be suitable for grazing land. The even sections and the unsold lands of the railroad company in these various localities, where these lands of the Weyerhauser Timber Company are situated, is of the same general character and chiefly valuable for timber. Taking both localities, there is practically very little of these railroad lands that would be valuable for agricultural purposes. The soil in the Coos Bay country possibly might be a little better after the timber is off than it is up in 1 West; but the amount of agricultural land there included in

that timber area there, is very limited, what would be called agricultural land is almost a negligible quantity, probably one per cent. There is some of that timber land, when the country becomes settled up and the timber is worked off, could be worked into small orchards and grazing, and general farming; and he would say that sixty per cent of the land that he examined, possibly a little more, after the timber is cut off, extracted, cleared and grubbed, and the stumps blown out, could be used for fruit purposes, and grazing, and some agricultural purposes. Take the country right through there, $100 an acre would be cheap for clearing it; he does not think it could be done for that, but that would be cheap.

Q. Don't you know that the clearing of these lands that are heavily timbered, in this fir country, would run from not less than $100 up to as high as $300 an acre?

A. I am well aware of that fact.

Q. That is the fact, is it?

A. Yes, sir.

Q. How do they clear this heavy timber land of its stumps?

A. Do you mean after the logs are taken off?

Q. Yes.

A. With powder mostly. Sometimes they burn the stumps out with fire.

Q. Have you ever seen them use giant powder and

black powder mixed?

A. Why, there is a stumping powder put up by these powder concerns for that purpose—put up a stick for that.

Q. Do you know what it costs per acre in this heavy timber for powder alone?

A. Well, I have bought powder and blowed out an acre or two, but I couldn't tell you exactly the cost of it.

Q. Have you any idea as to an estimate of what is would cost on this heavily timbered land just for powder alone, to say nothing of labor?

A. I should think it would be worth $10 an acre.

Q. You don't know?

A. I have no actual knowledge of the present price of powder, nor a very clear recollection of what we paid for it at the time, quite a number of years ago.

Q. Well, now, let me ask you, suppose that an actual settler was to go and apply to the company for 160 acres of this timber land that you are acquainted with, within the limits of this grant, belonging to the railroad company, and would be permitted to buy it at $2.50 per acre, and settle on it intending to make it his home, and was expected to make a living on this 160 acres without the right of pasturing on the outside lands, but to put that land to any use that he could, I wish you would state to the court whether or not there is any considerable number, or any of these quarter-sections that

could be made a home of, from which a man could make a living under those circumstances?

A. There is very little of it. The Government land that lay contiguous to this land, that was taken for homesteads, had small patches of timber destroyed on it, and the people stayed there until they could sell the timber proposition and leave it.

Q. Now, then, applying your knowledge and experience to the quarter-section of railroad land that I speak of, what would be the experience of a man who would go in there and try to make a home on a quarter-section and be confined to it?

A. He would starve out.

Q. Why?

A. Because he couldn't make a living.

Q. Why couldn't he make a living?

A. Unless he had capital enough to start with. Take a man with $5,000 to $7,000, he might go into that heavy timber there and make a living.

Q. He wouldn't make it on the land; he would make it on the money he would put into it?

A. Yes, sir.

Q. Isn't it a fact he could go out in the valley and buy, with his $5,000 or $6,000, land cheaper than he could clear it up.

A. It would be the best proposition for him to do.

Whereupon witness testified that a large part of his

work of cruising these lands was done along about 1903 and 1904, something of that kind; and these timber lands began to move on the market about that time, which was about the time when the Weyerhauser people began to buy these lands. There was very little market for timber before the Weyerhauser people commenced buying on the Coast. They made the market. They alone made the market. The fact that they came in here and commenced buying extensively induced other people to come. The first two or three years after the Weyerhauser people were here, there were not so many other people buying, but the number of buyers increased rapidly after the Weyerhauser people began to buy, and the number is still increasing. These timber people come chiefly from Wisconsin, Minnesota and Michigan. There are places in these timber lands, in its native state, where there is considerable sword-fern or what are called brakes. The old burns are mostly grown up to ferns first, and then brush comes in. It takes a good deal of land, in its present state, to support an animal anywhere in that country. He knows of pea-vine on that land, and there are places, isolated places, where the condition would be favorable, there is pea-vine on it. But pea-vine does not usually come into an old burn. There is some pea-vine on some of this land. The pea-vine is good feed in the spring and summer; but there is not enough to make it of any particular value as a feeding proposition.

Q. There has been some testimony in this case that there was a good deal of grazing up there over these

lands, in the shape of pea-vine, for cattle, and things of that kind. Would there be grazing there on a 160 acres, or would a man have to have several thousand acres to graze over?

A. He would have to let them roam at will over the country.

Whereupon, on cross examination, witness testified, that he worked for the Weyerhauser people when they commenced buying here; and has worked for them since that time, six years steady. He has been employed by the Weyerhauser people since about 1900; and has worked, not all the time, since that for them. Some of the time he has done work for the Government on the Yakima watersheds. He has been cruising, making it his business, for the last fifteen years. He has been working in the timber business and cruising for thirty years; he is now fifty-four years old and has been in the timber business since he was twenty years old.

Q. These lands of the Oregon & California Company included in this map, so marked, that you have examined, have been noticed by you in cruising the Weyerhauser timber?

A. Yes. Wherever we go into a piece of timber we take notice of the surrounding country, the general formation and the amount of timber to be found.

Q. Other than the lands in the vicinity of the Weyerhauser tracts, you have not examined?

A. Only as we go through getting to those lands,

now, traveling through the country.

Q. Just as you would casually go through? You made no special examination?

A. Made no special examination, unless there was a big burn. If there is a farm or anything in the vicinity of the land we are buying, or a clearing, we make a note of it.

Whereupon witness testified that it would be hard for him to describe accurately, by sections and ranges, the lands of the Oregon & California Railroad Company he had examined. He has no memorandum of his work there. There is quite a lot of that work that was done under other parties. They had done a lot of work that does not show on that map. Defendants' Exhibit 316. Referring to Defendants' Exhibit 316 he has done a good deal of work in Township 40 South, Range 5 East. They had headquarters at Pokegama, and worked there, got their supplies there, and worked on Jenny Creek, and up Jenny Creek. Jenny Creek, as shown on Defendants' Exhibit 316, No. 1, runs south through Townships 39 and 40, Range 4 East. He has done work in Township 39 South, Range 5 East; and was cruising in 39-6 East at a place called Buck Lake, and was cruising in there. He has done a little work along the Klamath River in Township 40 South, Range 6 East. The Klamath River runs through that township diagonally.

Q. Yes, I will permit you, Mr. Jacobs, to refer to that memorandum book, refreshing your mind as to the locations.

A. Section 9, 21 South, Range 1 West; Section 10, Section 12, Section 18, Section 26, Southeast quarter of Section 28, Section 32, Section 34. That is all in that township.

Mr. Fenton: What township was that?

A. 21 South, Range 1 West. In Township 22 South, Range 1 West, Section 2—not all of the section—551 acres, Section 4, Section 6, Section 10, Section 12, Section 18, Section 18, Section 20, Section 22, Section 26, Section 30, Section 32, Section 34. That is all in that township.

Q. What township is that?

A. 22 South, Range 1 West. 23 South, Range 1 West, Section 4, Section 8, Section 10. That is all in that township. 22 South, Range 2 West, Section 4, Section 6, Section 8, Section 12, Section 26, Section 28, Section 30, Section 32, Section 34. That is all of that township I have cruised. And 23-2 West, Section 6, not all of it, 216 acres; Section 20, Section 22, Section 26, Section 28—480 acres; Section 32, Section 34. That is all of that township. 22 South, Range 3 West, Section 12, 211 acres; Section 22, 240 acres; Section 24, 280 acres; Section 26, 320 acres; Section 28, 80 acres. That is all of that township. 23 South, Range 3 West, Section 2, 121 acres; Section 6, 405 acres; Section 14, 40 acres; Section 10, 240 acres; Section 18, 320 acres; Section 22, 320 acres. That is all in that township.

Q. That book that you refer to, Mr. Jacobs, that you have taken these sections down, you have recently

inserted those?

A. Yes, I took them down.

Whereupon, witness testified, that the Weyerhauser Timber Company gets a water power site once in a while, but its business is timber and lumber, and it is not engaged in agricultural pursuits, or acquiring agricultural lands for the purpose of exploiting them or of engaging in farming. He does not think there are much cheaper methods of clearing lands than blowing the stumps; that is the cheapest method there is of clearing land. One cannot haul them out as a stump there, but will have the dirt to get off the roots, and that costs about as much to get rid of the stump as it does to get it out of the ground, it has to be dug out. As a usual thing, if the land is any good, it is clay soil, and one has to get that off the roots before they will burn. If they are shot out it is clear and it is all ready to burn. They pull stumps, with stump-pullers, and use donkey engines quite extensively, with pulley blocks; but take fir stumps and it is not a successful proposition. There is a char-pitting method, and also boring and burning stumps. He has seen machines for this purpose, and that is another method that is used. They have devised during recent years, a number of new methods of removing stumps from the land and clearing them, but contractors clearing railroad right of way all hang to powder, and use the cheapest method there is known. In clearing for railroad purposes powder is used on stumps to remove the stump. It might be used to remove a log,

too, but not to remove the dirt; the way the railroad contractors shoot the stumps off, it doesn't blow the dirt right off the right of way; and he doesn't think the use of powder has anything to do with blowing the dirt off the right way. He has taken stumps out in street work; during the hard times in 1892 and 1893, they did some street contracting, and that has been his experience, although he has cleared lands too. He never did very much of it in this country for agricultural purposes. They did not have any serious difficulty with timber where he was brought up on a farm in Wisconsin, on the Mississippi River. The timber was scattering, and the stumps, they let stay in a good many years, because they could plow right along on their burns. The country was a hardwood proposition, a different proposition from this. It was what is called a hardwood country. Most of the clearings that he has seen in the western portions of Oregon and Washington, and he has seen a good many in the valley, were in vine maple, some alder, and timber of that kind. There are spots where they have got into the fir timber, but the majority of the farms that were cleared are not fir timber. From present evidences in the Willamette Valley a good deal of it was covered with a dense undergrowth, but he would judge from the looks of it there was a good deal of open country, too. In testifying concerning these lands he has referred to their present condition, as to their agricultural possibilities, with the timber on them. A burn does not necessarily kill the soil; that depends a good deal on the condition of the ground at the time of the burn and of the

timber standing on the ground. There will be a few small isolated places where the soil will be destroyed, kind of vitrified; but that is rare, and it does not apply generally. He has never been employed by the Southern Pacific Company, or the Oregon and California Railroad Company, with reference to their lands. This suit is the only thing he has ever had to do with them. He has cruised over a lot of railroad lands; that is, he took preliminary runs through them for the Weyerhauser people; lands that they did not buy, he just made a casual examination of them generally, to see whether they wanted the lands at the price. The value of these lands have constantly increased during the years buyers have come in, and the timber and land have both increased in value. He does not know what the Weyerhauser timber holdings are in Oregon, and would not like to state approximately what they are; he has never figured it out himself. The greater portion of these timber lands have been obtained from the railroad company and through the use of scrip in the even sections. The Northern Pacific Railway Company located the timber lands in Oregon and Washington with Northern Pacific scrip and then sold to the Weyerhauser people. The Weyerhauser people did not use any scrip, they bought the land; they paid more for the scrip land than they did for the patented land. Whereupon on redirect examination witness testified, that he did not read the description of all lands that he had cruised and as shown on his memorandum; he has some more, and practically the same conditions would apply to them. Whereupon, on recross ex-

amination, witness testified, that the lands he referred to are in Coos County, and that he cruised in Section 2-24 South, Range 10 West, 601½ acres; cruised 578 acres in Section 4-24 South, Range 10 West; Section 5 of the same township and range; Sections 6, 7, 8, 10, 12, 14, 17, 18, 19, 20, 22, 24, 26, 28, 29, 30, 31, 32, and 34, Township 24 South, Range 10 West; Sections 2, 4, 7, 8, 10, 12, 14, 18, and 24, Township 25 South, Range 10 West. The divide there is what they call the North Fork of the Coos, between that and Coos Bay. That is on the Pacific Ocean divide; the water runs into the Pacific Ocean or Coos Bay. The soil in those townships is not so good as it is further south. It would be agricultural land when the stumps are out, quite a per cent of it, but it is not as good as it is further south, around the south part of the bay or harbor. Whereupon, on redirect examination, witness testified, that there are a few people who went in there along the bottom lands along the creek, took up homesteads and lived there, had some cows, and made a living selling butter; that was not timber stuff; that was vine maple they settled on down on the little streams. No one wants a homestead in the timber land there as a farming proposition. There are some homesteads in the timber lands, he thinks, in there; they got some vine maple land, that is easily cleared. There are no homesteads in that timber land where he was. The even sections there were scripped by the Northern Pacific Railway Company. Timber men own, generally speaking, that timbered land now, where the title has passed out of the Government.

Whereupon W. T. GRIEVE, called as a witness on behalf of the defendants, being duly sworn, testified; that he is thirty-five years old, is assessor of Jackson County, has lived in that county since 1889, and has followed the business of farming, running stock, timbering, and official business since he was fifteen or sixteen years of age. Between thirteen and fourteen years ago he was deputy assessor, and after that he went to farming again; and for the last four years he has been the main assessor of the county. His father, John Grieve, was assessor when he was deputy, and he was deputy two years, and is now in his fourth year as assessor. He has lived in Jackson County about twenty-three or twenty-four years, and is acquainted with the unsold lands of the Oregon and California Railroad Company in Jackson County. The first introduction he had in regard to these lands was the second year—he would not swear positively whether it was the first or second year when he was deputy assessor —William S. Crowell up to that time was the Probate Judge of Jackson County—his father raised the assessment on all the Oregon and California Railroad lands at that time. He was acting as deputy, accompanied with a notary public, and rode through all the out districts even after the assessment was made. He had to ride the out districts, that was his part of it, to ride the out districts as deputy assessor. After this was done Judge Crowell ordered him to take a notary public and go among the farmers in these railroad lands and get affidavits from them as to the actual value of this particular tract of land, which he did. He refers to a con-

troversy between the company, in 1896, when Judge Crowell was County Judge, which resulted in some litigation as to the assessment of the land grant in Jackson County. He was instructed by Judge Crowell to procure this information. After he was deputy assessor, and prior to that time, he had always lived the bulk of the time, the bulk of the time operated in the out districts—that is, out along the creeks and rough districts. He ran cattle on these lands. He had examined these lands for his own personal information; and had located timber lands through the county; and also since becoming assessor, he had looked into the matter of this land business very carefully. He could not state that he had been over every section of these unsold lands in Jackson County, but he had been over every district, and every portion of each district where there would be any question; that is, he has practically seen all of it. To which testimony of the witness complainant objected as incompetent, irrelevant and immaterial, and it was agreed that this same objection should be deemed as taken to all the testimony of this witness relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified, that in ascertaining the value of these lands, in looking at it, considering it, and living there, he has been able to ascertain the general character of these lands, what it is good for and not good for, what is covered with timber and what is not covered with timber, etc. He does not know that he can state just exactly how many acres there are of this grant, if any, that

are practically of no value, and without any timber values on them, but if he remembers right they figured that up pretty close, and he believes that the amount was something like one hundred and ninety to one hundred and ninety-two thousand acres, something like that, close to that, that they considered worthless, as far as any farming was concerned. In certain districts of the county there are steep mountains, which are very steep, especially on the Applegate side is the steepest, and there is no timber on a lot of that; it is too steep for farming, unless one would terrace, and it would be impossible to do that; then it is very rocky, they have got some very rocky land there. On the Applegate side there is what is called chaparral on the lowest hills there, and there is some live oak shrubs, but no large live oak trees; there is this kind of brush, and live oaks and laurel, and manzanita; higher up there is the red rooting brush, and what is sometimes called slickleaf, and snow brush, and there is some vine maple. These worthless lands, of which he speaks, are all of a volcanic nature. There has been at times a good deal of mineral prospecting, within the limits of this grant, in Jackson County, and that is very true in regard to the west side of Jackson County; there is one mine in Township 31, Range 1 East; outside of that, on the east side, there is but very little; in fact there is no mining on the east side of Jackson County.

Q. What working mines are there on the west side of the county and anywhere within the limits of this grant, on the even sections or elsewhere, or on the rail-

road sections, where they have land that is unsold?

A. They are mining some, I guess, on railroad land that has not been sold; but I don't think there is any big operating mines.

Q. You mean prospectors?

A. Yes, sir.

Q. What is it called? What kind of mining is it called?

A. Well, pocket-hunters, they call them. Of course, there is several ledges of quartz. It is quartz and placer. There is the Opp mine. That is quartz. They have got a stamp-mill there, I believe ten stamps. There is Braden mine, close to Gold Hill. That is one of the oldest mines they have there. Then there is several small quartz mines around close to Gold Hill. Then in above Woodville they have mostly all placer, on what they call Jump-off-Jo Creek. Then on Sterling Creek they have a placer, and on Forest Creek they have a placer. And on Footes Creek, at the mouth of Footes Creek, there is a dredge known as the Champlin dredge, and on the head waters of Foote Creek they have small placers.

Q. What kind of mines are these—what mineral?

A. Gold.

Q. These pot-hunters, or pocket-hunters for gold, have any of them succeeded in locating any claims that they have developed and worked?

A. That is, you mean?

Q. Commercially, I mean.

A. You mean on the grant lands, or on any lands?

Q. On any lands on that side?

A. Well, the pocket-hunter, you know, he digs out a pocket, and that is about the end of it. They have succeeded in digging out some very rich pockets.

Q. These pockets, are they uniform, or are they transitory and scattered?

A. No, they are scattered.

Q. And do they last?

A. No, as a general rule, they never last. I never have known one yet to last.

Q. It is known, then, as a pocket mining country?

A. Yes."

Whereupon witness testified, that outside of the mining that may be in it, the only value of the remaining 251,000 acres would be for the timber there is standing on it, and possibly for what grass grows on it, that is, for grazing. The largest majority of the timber of this remaining land is fir; that is, the bulk of it. It will probably run, he should judge, taking it as a whole, the Oregon and California Railroad grant would not exceed twenty-five per cent pine, including sugar and yellow pine, which is above eighteen inches at the top. The balance of the timber would be red and yellow fir. The best portion of the timber is situated in the Jenny Creek, the Big Butte, Elk Creek, Evans Creek, Footes Creek,

and there is some on the head water of the Applegate, but it is considered that Applgate timber is rather light. For the districts that he has stated, he would be safe in saying that the timber would average 20,000 feet to the acre; and that is of commercial value, and is what he has testified to. It would be very hard to say, taking the whole thing, valleys and all, within the limits of this grant, referring to the 251,000 acres of the unsold portion, covered more or less with timber, what per cent in its present state could be used for any agricultural or horticultural purposes; and the reason why, is that to make it farming land it would necessitate the removal of some of the timber off of it. There are places that one would find openings, natural openings, small openings, but to go in and pick up a quarter section and take it as it comes, one would have to remove timber to get any kind of farming land and farm it. Taking the possibilities of this 251,000 acres on an average, as to each quarter section, if the timber was cleared, the land adapted to agricultural use, or that could be used for agricultural purposes, would not exceed one-eighth, which would be about twelve per cent. These agricultural parcels would be in spots. Take the Big Butte district, there is probably a township, close to a township, in there, that one might say would be all farming land, if the timber was off of it; that is to say, if the timber was cut and removed and the stumps grubbed out, could be utilized for some farm purpose; grazing, or vegetation, or grain, or something of that kind. It is not alfalfa land, it is a clay subsoil there. They plow it, but

it is not a success, it is not alfalfa land, that high land; but other stuff, they have grown hay and grasses on it.

Q. These small agricultural spots, where are they with reference to these streams that run up into the foothills and mountains?

A. That is, you mean, whether they are right along the streams?

Q. Yes.

A. Or whether they are scattered away from the streams?

Q. Yes, that is what I mean. What is your knowledge on that subject?

A. Well, the bulk of them, the large per cent of the land that would do to farm, of this character, probably could all be put under water, the largest portion of it could be put under water, but it is not along the streams. It is scattered away from the streams.

Q. It would have to be irrigated, then?

A. Yes, it is necessary to irrigate that land. Of course, it grows crops without irrigation, but then it is better to have irrigation.

Q. Something has been said in this testimony, or in the record in this case, by some of the witnesses, about grazing over these lands during a portion of the year. I want to ask you this question: Suppose that the company should sell to some so-called actual settler under the act of April 10, 1869, at the rate of $2.50 an acre, a quarter-section of this land in this 251,000 acres, and

the settler should have it in legal subdivisions, not necessarily in a square, but in forties, and he should be confined to making his living, by grazing the land or putting it to any useful purposes, on his 160 acres, I will ask you to state to the court whether or not such so-called or pretended actual settler, under these conditions, could or could not make a living for himself or family on this 160 acres?

A. He couldn't do it unless he had something else to fall back on to make a little money on; he coudn't go on and make a living at first.

Q. What do you mean by having something else to fall back on?

A. Some income. He coudn't move onto a quarter-section there and begin to make a living for him and his family at once—he couldn't do it.

Q. Why, Mr. Grieve, couldn't he do that?

A. Because the property is not in condition to do it. It takes too much to clear it. You have got too much to go through. In fact, I have tried it—I know it can't be done.

Q. Now, something has been said in this case about large sheep drivers or sheep owners, owning from 1500 up to 20,000 head, leasing these lands, or leasing lands of this character, and ranging over these lands, over a section of four or five hundred thousand acres. Now, what is the fact, if you know, as to whether these lands could be used in that way, and how large an area would

have to be grazed over in order to be practicable?

A. It would depend, of course, altogether on the bunch of animals you had in your herd. There is in Jackson County what we call spring range, which gives out—that is on the low foothills; that gives out about May—the last of May or first of June, not later than that. Then they have to drive to the higher lands for their summer range. Now, they would have to range over quite a territory. With the brush and timber there is on this land, it is a very hard matter to state just the number of acres that it would take to support an animal in that country; because there are places that there are openings in, of course, that there would be no brush, and it would be all grass; and then in the brush there is pea-vine and stuff, and there is a large amount of grass that grows in there, that is good feed. And there's some districts—in the white pumice district there around Prospect, there is absolutely not a spear of grass grows on it for a township.

Q. Well then, as a practical question, a man who would want to use this land for grazing purposes profitably, would want for, say, 1000 head of sheep, approximately, about how many acres during the season that he could range them?

A. This land is not like the Government forest reserve. There they go right into the summits of the mountains in the reserves, and it would take thribble the amount of this land that it would on the Government reserve land for the same amount of sheep.

Q. Why is that?

A. Well, you have got more timber to contend with, for in the Government reserve, when they lease a man their grazing lands, it is all in these glades, these open glades, on top of the mountains, in the larch timber or in the white fir, as we call it, and there isn't a man in Jackson County that runs sheep but what goes to the high mountains for his summer range onto the reserve. I don't know of a man in Jackson County, outside of one in the south that has his residence in California—he has the Weyerhauser people's tract rented there, and he grazes sheep on that; there is some of that in Jackson County—outside of that, there isn't a timber man in Jackson County that has got his timber lands under a lease to any stock raiser, because there is not grass enough to pay a stock man to pay the price that they will want for the range.

Q. The Weyerhauser Timber Company, I understand, get at the rate of five cents an acre from sheep men on their lands, under their lease, per annum. That would be $8.00 for a quarter-section.

A. Yes.

Q. Have you any knowledge of any of these lands within the limits of this grant being leased, or some quantity of lands being leased for grazing purposes at all?

A. No, I have not.

Whereupon, witness testified, that ranchers or far-

mers who happened to live along these little creeks pastured these railroad lands, but they did not, to his knowledge, there is not one of them, who pays any rental for any grazing lands. The railroad company owns the land and pays the taxes, and these ranchers have the range. The fine fruit country in Jackson County, famous for Rogue River apples, is located in the heart of the Rogue River Valley. The meridian line cuts the fruit district, the main valley, very nearly in two. That fruit district runs up from Ashland to Woodville. Ashland, he believes, is in Township 39 South, Range 1 East, and Woodville is in Township 36 South, Range 4 West; that runs diagonally there across. He supposes Rogue River Valley covers probably, well take and consolidate it, would probably be four or five townships. The valley is about fourteen miles wide in the widest place, and it narrows up about Ashland, a little south of Ashland, he supposes, it would be, not over three or four miles wide there.

Q. Now, what is the fact, if you know, Mr. Grieve, about there being a range of bare hills, that have no timber and not much of anything else on them, east of the valley, on the east side of the Rogue River Valley?

A. That is what we call the foothills.

Q. Yes, what is that covered with?

A. That is covered with white oak trees, and these scrub black oaks. They are all scrub trees—there is no merchantable oak. And poison oak, and chaparral, and stuff like that, that comes in.

Q. I have been riding through on the train, and didn't see any fruit on there.

Mr. Rabb: I object to the attorney testifying.

Q. I am making a question out of it. What is the fact about that?

Mr. Rabb: Objected to as leading also.

A. Those low foothills there, there is white oak, and there is black oak, and poison oak brush, and chaparral, and manzanita on them, and there is no particular value to them.

Q. The fruit lands, then, as I understand, are not situated on that character of land?

Objected to as leading.

A. In some cases, there is some of those hills are the same character of land as they are a little lower down. They run those orchards up about as far as they can get them on those foothills, and that is the same character of soil as there is on top. But you couldn't farm it there—it is too steep and rocky.

Q. In the west side of Rogue River Valley, around Jacksonville, what is the situation as to the character of land in the foothills, beyond the valley part?

A. That is a free soil,, on the west, around Jacksonville, is a free soil; and take it due north of Jacksonville, it is granite formation, and they even get—they have a quarry out there, and they are getting some granite out of there. And take it around Jacksonville and south of Jacksonville, the soil is free and red, a red

soil. And take it east of Jacksonville, between Jacksonville and Bear Creek, that is the black loam land, pretty near all of it, except some spots. It is very spotty.

Q. This that is east of Jacksonville, and towards Medford, and on either side of that space, isn't that part of this good fruit land?

A. Yes, sir; the best there is in Rogue River Valley.

Q. Yes. Now, I have been told, and I think that it is generally known, that some of this fruit land around Medford, when the trees are six and seven years old, and are set out to Yellow Newtowns, and what is the other standard?

A. Spitzenberg.

Q. Red Spitzenberg apples, that the market value of it is $1,000 an acre, or like that. What is the fact about that?

A. That is very true. They have sold for that, and they even have sold for $2,000 an acre, from $1,000 to $2,000 an acre. The Burrell people sold at $2,000 an acre.

Q. You refer to the Burrell Investment Company, of Portland?

A. Yes.

Q. Where are the lands of that company situated, that they have devoted to fruit culture?

A. They are situated in Township 38, Range 1 West, and maybe in 1 East. I don't know whether it is in 1 East or not.

Q. Are they in the valley?

A. Yes, sir; they are in the main heart of the valley. They are south of Medford.

Q. How far from Medford?

A. About four miles.

Q. How long has the Rogue River Valley been settled, from your knowledge, and from your knowledge of the history of that country?

A. I cannot give you the exact dates on that, but it is one of the oldest settled portions of the State of Oregon. Jacksonville, I believe, is considered among the oldest towns in the state.

Q. I call your attention to this map, Defendants' Exhibit 259, which shows in yellow body, Gold Hill, Tolo, Sams Valley, Beagle, Eagle Point, Agate, Medford, Willow Springs, Jacksonville, Phoenix, Talent, Ashland, and, according to the legend on this map, all that country in yellow consists of lands lost to the grant by adverse entries, that is, by donation land claim settlements, homesteads, or other settlements, in the early days. State to the court whether or not that yellow field there practically represents all of the agricultural and fruit lands of Jackson County?

A. It does.

Q. I notice on this same map Applegate Creek, which heads west of Jacksonville, and appears to run northeast out towards Wilderville, and then finally gets into the Rogue River, I think, somewhere near Grants Pass, does it not?

A. Yes, it heads due south of Jacksonville.

Q. I notice along that stream a body of yellow shown on this map. State to the court whether or not that yellow represents practically all of the agricultural land along the Applegate Creek, and Williams Creek country.

A. It does.

Q. I call your attention to the fact that on this map along Butte Creek, and Lake Creek, Little Butte, and up Antelope Creek, this same yellow field extends shown on this map. I will ask you if that does not show substantially all of the valley land or agricultural land along those streams in Jackson County?

Objected to as leading.

A. It does.

Q. I notice in this large yellow field in Jackson County occasional fractional sections of land in green, which on the map is supposed to indicate, according to the legend, the unsold lands of the Oregon & California Railroad Company, in some places there would be a forty and other places a quarter-section, other places almost a section with a 40 out that is yellow. What is the character of that land that is situated thus in the low

lands of the Rogue River Valley, or in that yellow field? What kind of land is that—this unsold railroad land?

A. There is some of that, one piece right here, around here at the mouth of Bear Creek, that is first-class stuff.

Q. How much is there of that?

A. Well, it seems to me—I cannot give you the exact acreage in that farm, but it seems to me it runs about 200 to 240 acres, something like that. That is under lease to somebody there—the company owns it. Now then, this, after you get back here on this side——

Q. Pointing to the east side of Phoenix?

A. Yes, this is the east side here. This is sticky. This is all sticky land here.

Whereupon, witness testified, that he means by sticky land that which is generally called gumbo; that is, land that is all run together. One cannot walk through it, it all sticks to his feet when it rains; it is not free soil. They farm this land. The desert is between Eagle point—Agate is right on the edge of the desert, which extends from Antelope Creek down into the forks between Bear Creek and Ashland. That desert is hard pan land, and is used for the purpose of fruit. They are developing it now. The Rogue Lands, Incorporated, have begun to develop it; it has never been cultivated before in the main desert, only on the edges. This company has run up in the desert and they are developing

it by putting water from Little Bear Creek. They have brought a ditch from Little Bear Creek, and put in a ditch there and are selling water to the farmers. They take a drill and drill down through the subsoil of rock on that desert there, and put in two shots of giant powder down about eight feet, blowing it up, crushing up that rock, and when they do that they put in a tree. Then they went to work on about probably an acre and a half there, blasted it all over, ever so often, and planted alfalfa on that. It has not done very well even then, but it is growing. They got a stand, but he does not think it is a success, the alfalfa part of it; it may be, it has not shown. There is lots of that yellow field, speaking of Defendants' Exhibit 259, that is spotted. The reason why it won't make good fruit land is that they have the hard-pan to contend with. Hard-pan is land that is cemented together in strata. There are two stratas there that they have got to go through, and that is the reason they went eight feet. There is only about three, he guesses, right under the surface there is a hard-pan, about eight inches down; and then about four or five feet, five to eight feet, he thinks, that the other stratum runs; and they blasted through the first stratum, which was not a success; and then they had to go down through the second. It is a Spokane company that obtained this water-right on this desert, and brought up the desert and is trying to develop an irrigation section to be sold; they bought that several years ago and have been developing it with this water on the land in the dry season, setting their trees, and then they have been sell-

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ing it. They are just young trees; they had one orchard there, the first one they planted, they went through the first stratum of this bed-rock, or hard-pan, and they pulled that all out; it was not a success; the trees died. There are some good fruit lands around Eagle Point; they grow Yellow Newtown and Spitzenberg apples there, principally along the creeks. He cannot state exactly how many carloads of these commercial apples are shipped annually from the Rogue River Valley; they expect this year to ship out a thousand carloads, but they won't do it. They are shipping some to European countries and some to New York. They depend on New York and Chicago. He cannot state definitely in regard to the amount of sales of pears, the number of carloads; it would only be hearsay, but he knows that there are a lot of pears shipped, and they are the best there is, they claim. He could not state what they get f. o. b. for their pears at Medford which are shipped to New York. The market is largely New York and Chicago. He does not know exactly what they get for the Yellow Newtowns and Spitzenbergs shipped to Chicago and New York and elsewhere in the east, but he believes that they figure close to four cents a pound, which, figuring fifty pounds to a box, would make close to $2.00; about $2.45 to $2.50 somewhere close there; it is close to four cents a pound or better. These apples and pears go out on the Southern Pacific from Medford; that is, they are started from Medford on the Southern Pacific, and are shipped from Medford to New York by rail; that is, to New York and Eastern

points. He cannot testify what the grower gets for delivery on the car. He can tell what he is doing with fruit. He purchased apples last fall from a man in Ashland by the name of Barnhard, who charged him four cents a pound, figuring fifty pounds to the box, and who said he was charging him just what he got at Ashland. There are a lot of peaches grown at Ashland, and some grapes grown at Jacksonville. There are some vineyards there; there are no large vineyards; there are some that they make a commercial business of at Jacksonville and Medford. There is one man at Medford by the name of Demmer. They are annually shipping considerable peaches from Ashland; and they have now planted peaches more extensively all over the valley for what they call fillers. That is where a man sets out an apple and pear orchard, he has to set his trees so far apart; they figure that there will be about seven or eight years wait on an average for pears; they put these peaches between the trees, and in three or four years they come into bearing; then when the apples and pears come into bearing then they grub out the peach trees, so they are called peach fillers. They have not irrigated in the Rogue River Valley until very recently, but they do now. They have put water onto the Snowy Butte Orchards. It makes considerable difference as to the fertility and production in the Rogue River Valley land, whether one has water. The blacksoil, or black land, in Jackson County, between Jacksonville and Central Point, is what they call the alfalfa land; it grows anything, but that is alfalfa land; it is very deep soil,

and has no clay subsoil. Some of it has been set to orchard, but they have found, as a general rule, that land is too strong, and makes too much wood growth; and in some cases, such as the Snowy Butte Orchards and the Hanley Orchards, they have grubbed some of their orchards up, the orchard is subjected to blight, and they have put it back into alfalfa. They ship wheat into the Rogue River Valley. They do not produce any wheat there. They ship in all the grain that is used there. They ship in barley, oats and even potatoes. There was more grain there prior to the time when they went into fruit, but they have always shipped in grain, instead of shipping it out. Whereupon, on cross examination, witness testified:

Questions by Mr. Rabb:

Q. Mr. Grieve, do you remember having a conversation with Harry E. Laughlin, Special Agent of the General Land Office, March 16, 1912, at the court house in Jacksonville, Oregon, with reference to these lands?

A. What is the name?

Q. Harry E. Laughlin.

A. There has been agents in there, but I cannot recall that name. There has been several agents in there. There has been Government agents and railroad agents, you know, in there, but I haven't kept track—first one comes and then the other— and I don't know, I couldn't state as to that, as to the man's name. I wouldn't want to swear to the man's name.

Q. I hand you this document, Mr. Grieve, and ask you to examine it and state whether or not that is an affidavit executed by you on the date that it purports to have been executed.

A. Here is one here 5 East, they have got it. That don't include that. This is my signature right here. I remember this. There must have been a mistake when they put that 5 East down there. I don't remember any 5 East being there. This 5 East here—I don't know nothing about that.

Mr. Fenton: How is that?

A. There is 5 East marked here.

Mr. Fenton: The question is, did you sign the document?

A. Yes, I signed this document; but this 5 East—I don't know anything about that.

Q. This document that I have handed you has your signature on the margin of the first page.

A. Yes.

Q. And at the end of the statement?

A. Yes.

Q. In this document, is it not stated——

Q. Is it not stated, "I. W. G. Grieve, a citizen of the United States, 35 years of age, residing at Jacksonville, Oregon, where I am County Assessor of Jackson County, Oregon, being duly sworn, depose and say: I have been county assessor for about three years last

past. I have lived in Jackson County, Oregon, for the past twenty-four years; and prior to becoming county assessor, I spent about seventeen years in the stock business, and about four years in locating people on Government land. During my residence in Jackson County, I have lived at Central Point, Prospect, Jacksonville, on Little Butte Creek, on Big Butte Creek, and elsewhere. I have ranged cattle on almost all the out-districts of said county; and through ranging cattle, locating people on lands, hunting, performing the work of county assessor, etc., have become very familiar with the lands in all parts of said county. I have had experience in farming; and by having lived most all my life in farming communities, have become familiar with agricultural conditions, particularly in said Jackson County, Oregon. I am very familiar with the lands now owned by the railroad in the following described townships; and I estimate the number of quarter sections thereof which are suitable for settlement purposes, that is, which would support a family, at the percentages stated below:

"Those which drain into Trail and Elk Creeks and the upper Rogue River, namely, Tps. 32 S., Rgs. 1 W., and 1 and 2 E. W. M.; Tps. 33 S., Rgs. 1 W. and 1, 2 and 3 E. W. M.; Tps. 34 S., R. 1 W. and part of 1 E., and 35 S., Rgs. 1 W. and 1 E., 20 per cent.

"Those which drain into Big Butte Creek, namely, Tp. 34 S., Rgs. 2 and 3 E. and part of 1 E.; Tps. 35 S., Rgs. 2 and 3 E., and part of Tp. 36 S., R 3 E., 40 per cent.

"Those which drain into Little Butte and Antelope Creeks, namely, Tps. 36 S., Rgs. 1 W. and 1 and 2 E., and part of 3 E.; Tp. 37 S., Rgs. 1, 2, 3 and 4 E., 20 per cent.

"Those which drain into Evans and Sardine Creeks and tributaries, namely. Tp. 33 S., Rgs. 2, 3 and 4 W.; Tp. 34 S., Rgs. 2, 3 and 4 W.; Tp. 35 S., Rgs. 3 and 4 W., and the portions of Tp. 36 S., Rgs. 3 and 4 W., which are north of Rogue River, 20 per cent.

"Those drained by Sams and Beagle Creeks, namely, Tp. 35 S., Rg. 2 W., and part of Tp. 36 S., R. 2 W., 50 per cent.

"Those which drain into the Rogue River on the south, and into Bear Creek as far south as Ashland, namely, part of Tp. 36 S., Rgs. 2, 3 and 4 W.; Tp. 37 S., Rgs. 1, 2 and 3 W., and part of 4 W., and Tp. 38 S., Rgs. 1 W. and part of 2 W., and 1 E., 50 per cent.

"Those which drain into Jenny and Dead Indian Creeks and those south of Ashland, which drain into Bear Creek, namely, Tp. 38 S., Rgs. 2, 3 and 4 E.; Tp. 39 S., Rgs. 1, 2, 3, 4 and 5 E., and part of 1 W.; Tp. 40 S., Rgs. 1, 2, 3, and 4 E.; Tp. 41 S., Rgs. 1 2, 3 and 4 East, 30 per cent.

"Those which drain into Applegate Creek and its tributaries, namely, part of Tp. 37 S., R. 4 W.; Tp. 38 S., Rgs. 3 and 4 W., and part of 2 W.; Tp. 39 S., Rgs. 2, 3 and 4 W., and part of 1 W.; Tp. 40 S., Rgs. 1, 2, 3 and 4 W.; and Tp. 41 S., Rgs. 3 and 4 W., 15 per cent.

"Taking all the quarter sections together which I have estimated above as suitable for settlement purposes, I estimate that they will average twenty acres of plow land to the quarter section; and I know that practically all of the railroad lands in the territory above mentioned is good grazing land.

"I consider the above estimates as conservative; and I know that the climatic and soil conditions of the lands in Jackson County, Oregon, are favorable for agricultural purposes, and fruit growing."

A. They have got there, they have got my initial wrong in the beginning there. It is all lead pencil—I don't know. I know that is my signature to it.

Q. That was a correct reading of this document, wasn't it, Mr. Grieve?

A. Yes, sir.

Mr. Fenton: The document speaks for itself, and is the best evidence.

A. That is all right—I don't deny. But this "W. G."—that is not my initial. I didn't notice that. I couldn't swear whether it was "W. G." or "W. T." at that time that he put down there. Of course, this is my signature here. I remember the document.

Q. The statement that I read was contained in this document?

A. Yes. We talked that over—I cannot recall the man's name. There has been so many in there, that I cannot—I don't know now.

Mr. Fenton: The question is, is that you signature to the document?

A. Yes, that is my signature. There is no question about that.

Whereupon complainant offered said affidavit, referred to in the testimony of the witness, as part of his testimony, marked Government's Exhibit 120; to which defendants object, unless offered for the purpose of impeachment. Whereupon said exhibit was received in evidence, so marked, and is hereinafter set out and described, and made a part of this statement of the evidence, and identified as such. Whereupon on redirect examination witness testified:

Q. In whose handwriting is this statement that you signed, Mr. Grieve?—Government's Exhibit 120.

A. It is the handwriting of the party that was there at that time. I cannot recall his name. What did you say his name was?

Q. Government's counsel didn't read you the name. Did you hear the name?

A. Yes, sir; I heard the name. He told me the name there, but I cannot recall it.

Q. Harry E. Laughlin.

A. There has so many been there.

Q. "Harry E. Laughlin, Special Agent, G. L. O."—General Land Office. The 16th day of March, 1912. How long were you talking with Mr. Laughlin

before this statement was written?

A. If I remember right, the gentleman that came in, whether his name was Laughlin or not——

Q. That doesn't make any difference what his name was.

A. I cannot swear. He came in in the morning—I believe it was in the morning he came in, or some time—I think that I was busy at that time—and he wanted to know if I would give him some idea in regard to the O. & C. Lands; and he came back.

Q. How long a time were you talking to him?

A. I think he came back in the forenoon. I don't suppose he was in there—he wasn't in there to exceed an hour, I don't believe, if I remember right. It wasn't long, anyway.

Q. Then how long after this conversation with him, which you think may have been an hour, was it that he came back with this affidavit?

A. That was when we had the conversation. He came in and asked me, and I told him he would have to come in later, if I remember right, and then he came back; and whether he wrote that document there or not, I cannot state, or whether he had it written out when he came in.

Q. Whose language is used in this affidavit? Whose language is this that is used there—his or yours?

A. That in regard to the townships and ranges, I

think it is mine.

Q. I mean, whose is the other languarge, aside from the mere description?

A. He wrote that out, if I remember right.

Q. For instance it says here, using the words "suitable for settlement purposes, that is, which would support a family." Now, whose language is that?

A. Well, he wrote the document. He asked me them questions as he went along, you know, and of course he was the one that wrote the document. As to whether I put that in there, I couldn't swear to that.

Q. Well, what do you mean—what did he tell you was the meaning of land that was suitable for settlement purposes, if he did tell you?

A. That is, he wanted an approximate estimate on it. I told him I couldn't be exact on that, because that is something that was very hard to get at. We had no cruise.

Q. What do you mean by the use of the words "settlement purposes?" Just tell the court, in your own way, what you mean by that.

A. Well, that would be land that would actually be level enough to till, and it would be land that contained timber and everything, just as the land stands now, in its raw state. That was the information he wanted when he came in there.

Q. Did you believe land suitable for settlement

purposes would include timber land?

A. Yes, that included the timber land, that included all lands, that had everything on it; that is, as it is right today.

Q. What I am getting at, have you included in your definition of land "suitable for settlement purposes" lands that were timbered, but the timber of which could be cleared and grubbed and the land utilized in that way for settlement purposes?

A. Yes, sir; yes.

Q. Now, when you say, "Taking all the quarter sections together which I have estimated above as suitable for settlement purposes, I estimate that they will average twenty acres of plow land to the quarter section," you mean twenty acres of plow land after the timber is cleared?

A. Yes, sir; after the timber is cleared.

Mr. Rabb: Objected to, as the witness has previously testified that the statement related to the character of the land in its present state.

Q. Well, you mean in its present state with the timber on it?

A. Yes, with the timber on it.

Q. But you didn't mean by the words "suitable for settlement purposes," that a man would go out there and settle on a piece of timber land, and then make a living off of it just as it was, with standing timber on it?

A. No, no. It is simply that this could be—there could be this much plow land covered to a quarter section.

Q. That is, it is possible to obtain it by clearing the land; not otherwise?

A. Yes, sir.

Q. You don't mean that every quarter-section would have twenty acres of plow land on it? That is, twenty acres of land that had timber that could be cleared, that would be suitable for settlement or agricultural purposes—that every quarter-section would have that?

Mr. Rabb: Objected to as not a proper question.

A. No, that was as a lump sum. That was an aggregate. That was the question that was put to me at that time.

Q. Did this examiner, this special agent, tell you what he wanted this for?

A. I don't believe that he did. I don't believe that he told me. There has been so many of them there. There has been several in there.

Q. Did he tell you anything about this suit between the Government and the company, this man Laughlin?

A. I cannot recall that, because some of them have, and some of them have not. Now, if I met the man, if I met him face to face, I would know the man.

Q. And it has in this, "I consider the above estimate as conservative, and I know that the climatic and soil conditions of the lands in Jackson County, Oregon, are favorable for agricultural purposes and fruit growing." Now, what does that mean? All the lands, of everybody in Jackson County?

A. That means all the lands—that means climatic conditions in Jackson County.

Q. And includes the Rogue River Valley?

A. Includes all of it, yes. It is stated there—the townships and ranges given there even in the valley.

Q. I understand; but he uses the expression, and makes you use it, "I know that the climatic and soil conditions of the lands in Jackson County, Oregon, are favorable for agricultural purposes and fruit growing. Did you mean by that statement to include all the lands in Jackson County, including the Rogue River Valley?

Mr. Rabb: Objected to upon the ground that counsel is assuming facts not shown by the testimony of the witness.

A. Yes, sir.

Q. Were you asked by the attorneys or counsel for the Government, or any one representing the Government, to be a witness in this case?

A. No, I was not.

Whereupon, W. E. BALL, called as a witness on behalf of defendants, and being duly sworn. testified,

that he resides at Toledo, Lincoln County, is forty-eight years old, is county assessor of Lincoln County, and has been such for nearly five years. Lincoln County was created and cut from Benton County in 1893, he thinks it was. He is familiar with the unsold lands of the Oregon & California Railroad Company situated in Lincoln County, and the company owns in that county, according to his recollection, 15,906 acres. His duties as county assessor caused him to investigates these lands as far as he could. He has followed the usual travel through trails and roads running in through that country, and taking observations in a general way of the lands; and he thinks he viewed, at least he intended to view, substantially all of the lands. He knows what is merchantable timber when he sees it. The character of the timber that generally grows on these lands is second growth fir, which predominates in the timber in that country. He has a little memorandum he took off of his books before he started to make the assessment, which will refresh his memory as to the character of these lands. To which testimony of the witness complainant objected as incompetent, irrelevant and immaterial, and it was agreed between the parties that this same objection should be deemed taken to all the testimony of this witness, relating to the character of the lands within the limits of these grants, settlements thereon and public land entries thereof. Whereupon witness testified, that he thinks he can remember substantially. The portion he considers where the old growth predominates is 480 acres, in Township 14 South, Range 9 West, and there

would be about 6,000 acres, or a little more, of young fir timber, or what he calls second growth, and that land is chiefly valuable for timber. This second growth timber is considered merchantable. In a general way the balance of the land is called hill land; but in these hills are some bench lands, some small bottoms, in places through it. He would call that hill land which is steep, practically worthless outside of the timber, and he thinks there are perhaps six or seven thousand acres; portions of this six or seven thousand acres could be good for goat range perhaps, if cleared. It has salal, alder, vine maple and some fern mixed with the salal in places on it. There are some tracts of this six or seven thousand acres, in places, small tracts of it, that could perhaps be used for agricultural purposes; and he would say that scattered through this six or seven thousand acres, fifteen per cent of it could be used for agriculture or horticulture. These parcels are all scattered through the six thousand acres, and are small benches and small bottoms on creeks, scattered pretty generally through these lands. Of the balance of nine thousand and some odd acres, about three thousand acres are what they term better land than the hills he has been describing. It is better because it is nearer roads and settlements, and a little more level in its character—a little better land. But this is not all in one body. This is scattered through this remaining nine thousand acres and over. They term it a little better land and assess it a little different. It is not scattered all the way through, but it is not all in one place; it is nearer to settlement, nearer to roads and

is a little more level as a whole. It is covered about the same, except he forgot in the first place to say that there is some young fir scattered over in places, some small trees, all over this country. This 3,000 acres, to which he refers, would need to be cleared of brush and timber —he thinks, it would. He has had a little experience in clearing lands, not that kind of land, but in clearing lands, as he is a farmer himself, or used to be, before he got into the assessor's work. He does not know exactly, but his judgment would be that this land perhaps would cost to hire it cleared and put in cultivation from $25 to $50 an acre. This land in portions of it is rough; there are portions of what they term bench, which is practically level; there are portions of all this land which is rough hills; of this 3,000 acres, as near as he could judge, there would perhaps be 25 to 30 per cent of it that could be utilized for agricultural purposes, or for fruit and things like that. The balance of the nine thousand and odd acres, after taking out the 3,000 acres, is covered by second growth timber and old growth, and they value it principally for its timber, and it is chiefly valuable for its timber. He would say that of the total of 15,906 acres, 1,500 to 2,000 acres are agricultural and horticultural, thus scattered and in its present condition. These small tracts making up this 1,500 to 2,000 acres would range from five to fifty acres in a place. There is none of this land cleared so far as he knows. He never saw any of it cleared, and there is none of it, in a state of nature, that is fit for agricultural or horticultural purposes, until it is cleared; that is, he does

not think so; he never saw any. He means that there is about 1,500 to 2,000 acres in all that could be made useful for agriculture or horticulture. It would be about ten per cent of the whole 15,906 acres.

Q. Now, suppose that the company should have an applicant under this Act of Congress of April 10, 1869, to purchase 160 acres in legal subdivision all together—I mean in a string of forties, or in a rectangle or square, as the land might be selected, at the price of not to exceed $2.50 an acre, and in a quantity not exceeding 160 acres, and the applicant bought it for a home, for settlement purposes, upon which to live and make a home, I will ask you to state, from your knowledge of this land and the conditions in which it is at the present time, whether or not such person, if he were confined to his quarter-section thus selected, and not allowed to use the balance for grazing, was expected to make his living on that piece of land for himself and his family, and make a home of it—whether in your judgment a man could find a quarter-section that would be suitable for a home, for actual settlement, upon which he could make a living?

A. Yes, he could find some. There is some that he could make a home of.

Q. Out of this 1,500 or 2,000 acres?

A. Yes, sir.

Q. But with that exception, what would be the success of trying to settle this land?

Q. You may answer now. Supposing the settler

was confined to the quarter-section?

A. I don't think it would be a good business proposition for him to undertake it on this land.

Q. What is the fact, in your judgment as to whether or not anybody would undertake to make settlement and homes on this land, eliminating this 1,500 to 2,000 acres, and whether it is practicable?

A. They might some undertake it, but I doubt of its being practicable. I don't think so.

Whereupon, witness testified, that there was a fire through that country, commonly known as the Yaquina Bay fire, years ago; the old settlers say there were two fires, which one of them burned this part he does not know; one in 1858 and the other in 1868. They burned a great scope of country. There are some burned stumps standing there yet in places. This burned area is the same country which he has been describing as hill lands. It was originally timbered land, principally, he thinks. There is some indication in this burned district of reforesting; in places it is covered now with a young growth of fir. It would, he thinks, if reforested scientifically, if seed were scattered over it, in his judgment, ultimately go back to good fir timber; and if reforested it would be chiefly beneficial for timber; and it is in the timber belt of the Coast Range of mountains. Whereupon, on cross examination, witness testified, that he had been assessor of Lincoln County nearly five years; this is the fifth roll he has made, which he is now making. They did not cruise the timber in Lincoln

County for the purpose of assessment; they have no cruisers. He gets the best information he can through deputies and through his own observation. He tries to get deputies who knew conditions and knew the country in each locality; and in this particular case, of these railroad lands, the first year he was assessor, he sent a deputy through this country to survey these lands and mark out on the plat what was timber and what was not. He assessed them that year from that knowledge as a deputy assessor, and witness has the plat in the office now which that deputy marked. The information he has other than this is general, and his own observation in going through the country and talking with the people in through there. He never personally made an examination by running the lines, or segragating these railroad lands, and never attempted to cruise the lands, or make an examination on the ground, except in passing along the traveled trails and roads; and to some extent he has based his opinion as to the character of these lands upon the reports made to him by men that have worked under him. He does his work on their reports. Lincoln County is a hill county, and these lands, he thinks, lie on the western slope of the Coast Range. Practically all of those lands on the west slope of the Coast Range have red soil and grow vegetation profusely, due to some extent to the moisture on that side of the range. Lincoln County is not very much of a dairying county yet, they have started in on it. The dairying business is more extensive, perhaps, north of there in Tillamook County, but they are starting in the

dairying business in Lincoln County. The lands they farm in Tillamook County, with few exceptions, are bottom or bench lands; the hill land of Tillamook County is not farm land, so far as he knows; he never heard of it. A greater portion of these lands in Lincoln County is now set with some kind of small timber. There are some lands in Lincoln County not covered with timber, tide lands and some lands along the coast, that have simply salal, no timber. There is very little logged off land in Lincoln County; there are some old burns that are being cleared, very little, if any, logged off lands, because they have but very little in Lincoln County, and no logging is done there. The only railroad they have is the road running from Corvallis over to Toledo in that county. He classified these lands by getting information for the office of what portions were tillable, and what portions were bottom and could be tillable, what portions were rough, and what portions were timber lands; but on the roll they say so many acres of land worth so much money, and do not classify them on the roll. They added these different character of lands all together in the office, and set it out on the roll as so many acres of land worth so many dollars, without classification. Fruit does pretty well in that country. It is a sparsely settled country. They have family orchards. There is no merchantable and no marketable fruit raised for market; very little of any kind of fruit in Lincoln County; fruits and berries do well there. He recognizes the photographs shown in Government's Exhibit 121, entitled "Toledo, Oregon." These two photo-

graphs are pictures taken of a sawmill in Toledo, and showing a hilly background, with some timber on it. It is a photograph of Toledo, with the hills in the background, and is situated in Lincoln County. Whereupon complainant offered said documents and photographs in evidence, as Government's Exhibit 121. To which defendants objected on the ground that the documents or photographs do not relate to the lands in suit, or similar lands, and is therefore irrelevant, incompetent and immaterial, and so far as the article is concerned, is hearsay. Whereupon said exhibit was received in evidence, and is hereinafter set out and described, and made a part of this Statement of the Evidence, and identified herein as Government's Exhibit 121. Whereupon, on redirect examination, witness testified, that he did not confine his knowledge of these lands altogether to these reports made to him by his representatives in the field; he has seen the country, and thinks the whole of it; and has been through the country several different ways, in the settled parts, where there are roads and trails through which he could get through, he should think a territory covered by one-half of these lands, perhaps, but maybe not on each piece of land, but through the country and he is satisfied that he knows the character of these lands. Referring to Government's Exhibit 121, to the picture, "Glimpse of Woodland Scenery in Vicinity of Toledo," his best judgment is that that is the Siletz River, north of Toledo, and most of it is a timbered country. There is lots of fine timber in the Siletz country. He does not recognize, or locate, the picture "Bottom lands near To-

ledo are especially productive." The bottom lands around or near Toledo, or in the vicinity of Toledo, are principally tide lands. The statement in this exhibit "Vast timber resources. Directly tributary to Toledo there are, at a conservative estimate, between 15,000,000,000 and 20,000,000,000 feet of merchantable timber," is overdrawn, how much, would all depend upon what one would consider tributary to Toledo. Practically all of the timber that is near Toledo is on the Siletz; and Toledo is nine miles from the Siletz River; and if they counted the Siletz country as tributary, that would be a good estimate. Very little of that timber could be delivered at Toledo, except by rail. They would have to build logging roads; and the same thing is true of the mills on Yaquina Bay. There is a short road, perhaps a mile and a half long, running up the slough. They haul these logs to tidewater and float them to the mills. This road does not tap the main body of timber, however; it does not reach them. Toledo claims seven or eight hundred population, and is the county seat of Lincoln County; Toledo is on the Yaquina River, which empties into Yaquina Bay at Newport, which is at the mouth of Yaquina River and Yaquina Bay. The Corvallis & Eastern Railroad runs from Corvallis, through Toledo, to Yaquina Bay. There is about half of Lincoln County that is timbered with merchantable timber. He has seen these folders, marked Government's Exhibit 121, but he has never examined them very closely; he does not know that he has ever seen one just like this one, but he has seen some of them. Whereupon, on

recross examination, witness testified, that he thinks the timber in Lincoln County is due north from the western border of these lands on the Siletz River, in that vicinity there; a little west, principally north. Stock raising would be, he thinks, the main industry of the people in Lincoln County. They raise sheep, goats and cattle. They raise Angora goats to quite a large extent. He thinks that Government's Exhibit 121, purports to be issued "under the co-operative Community Plan of the Southern Pacific Lines in Oregon. Wm. McMurray, General Passenger Agent." He remembers seeing one like this one, and examined it a little, and thinks this is the same.

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